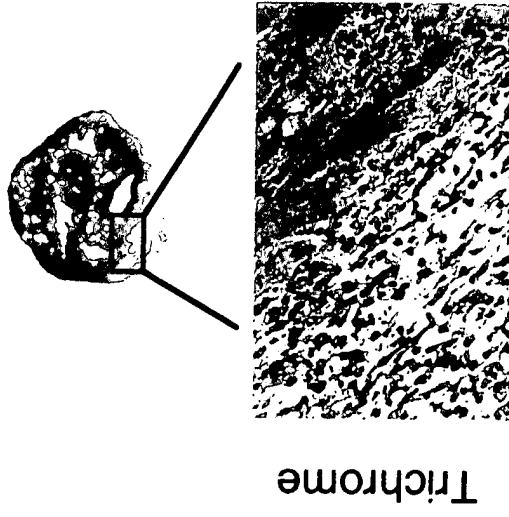
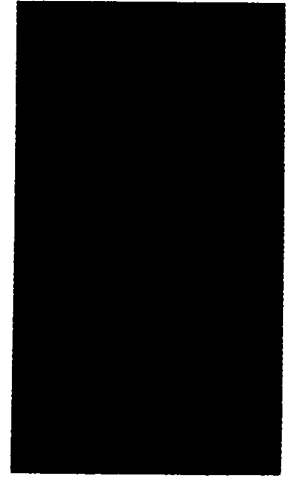


FIGURE 1A
Myocardial infarction

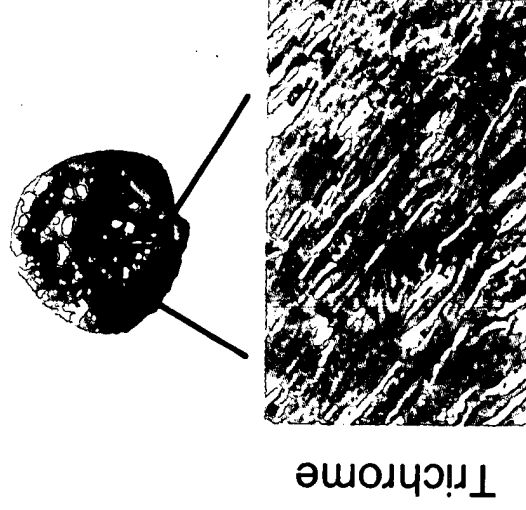


CD34⁺

A horizontal arrow points from the trichrome-stained heart section to the CD34+ immunohistochemistry panel.



Sham procedure



CD34⁺

A horizontal arrow points from the trichrome-stained heart section to the CD34+ immunohistochemistry panel.

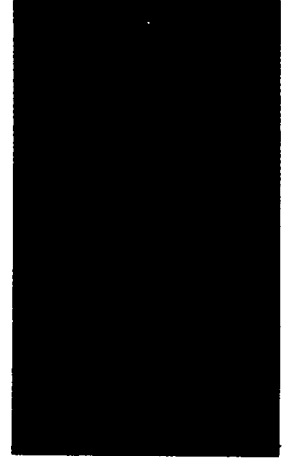


FIGURE 1B

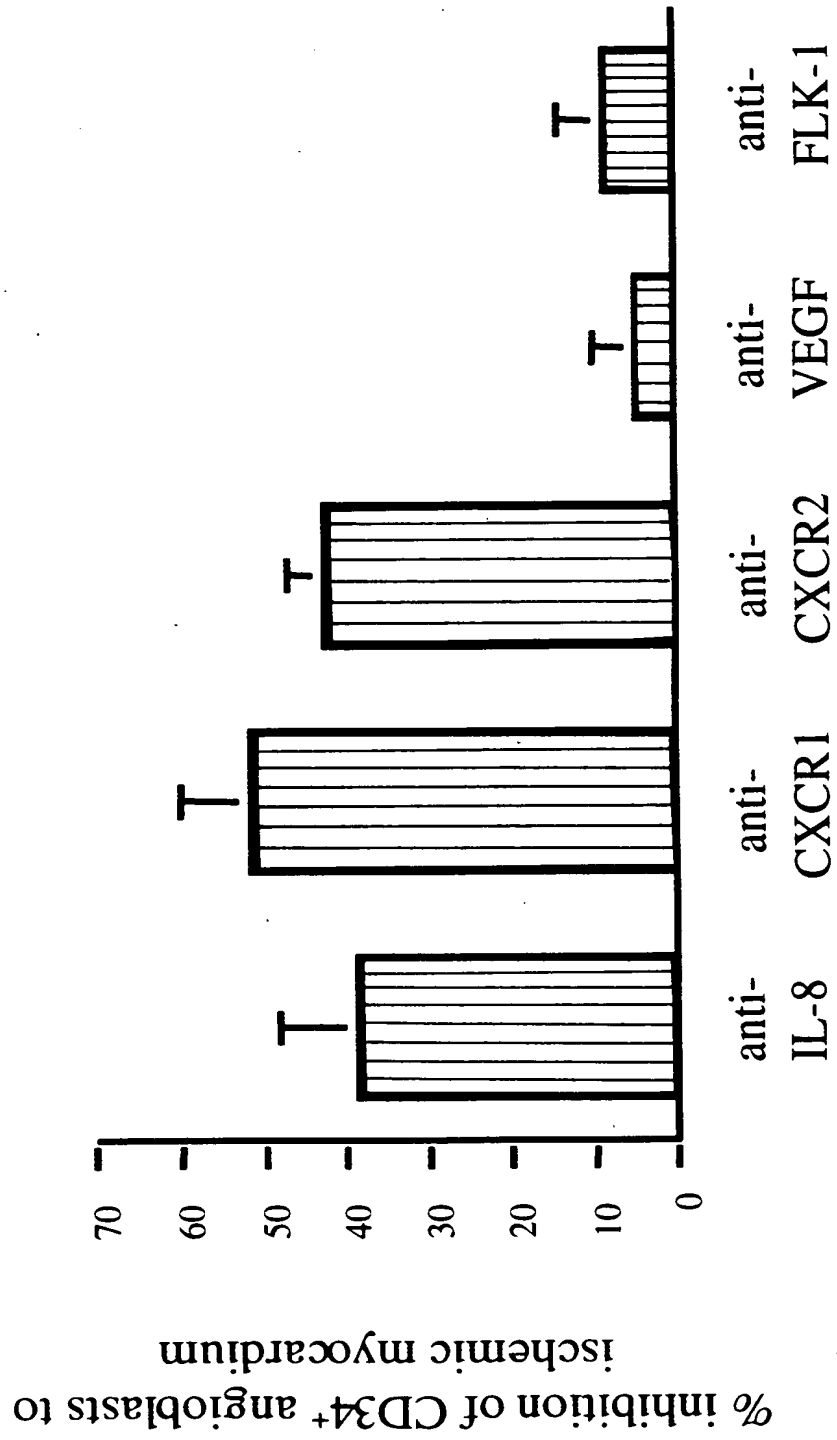


FIGURE 1C

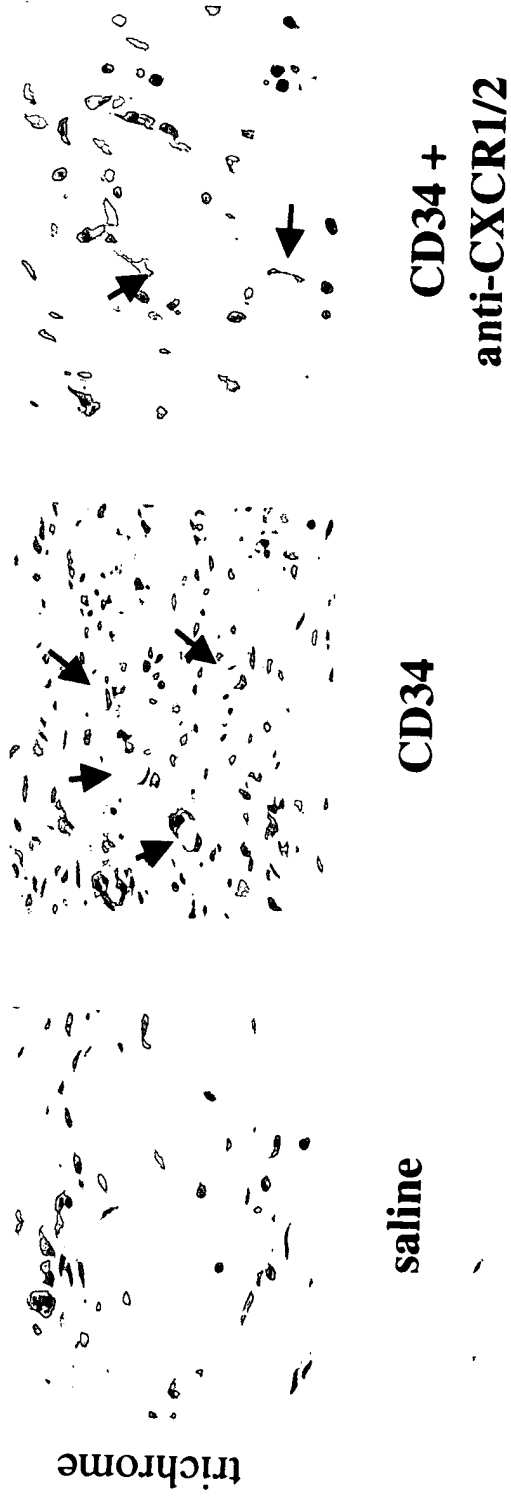


FIGURE 1D

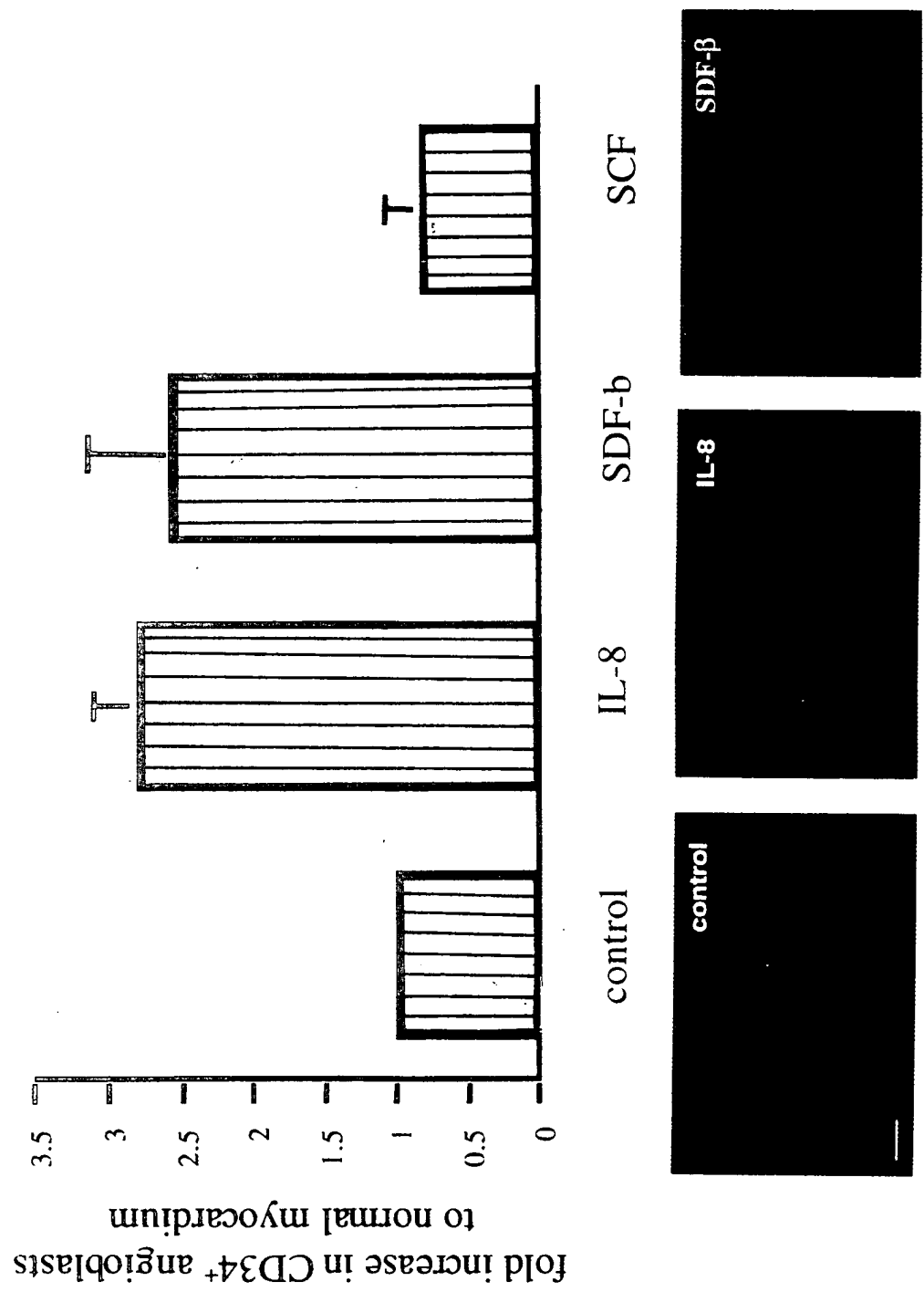


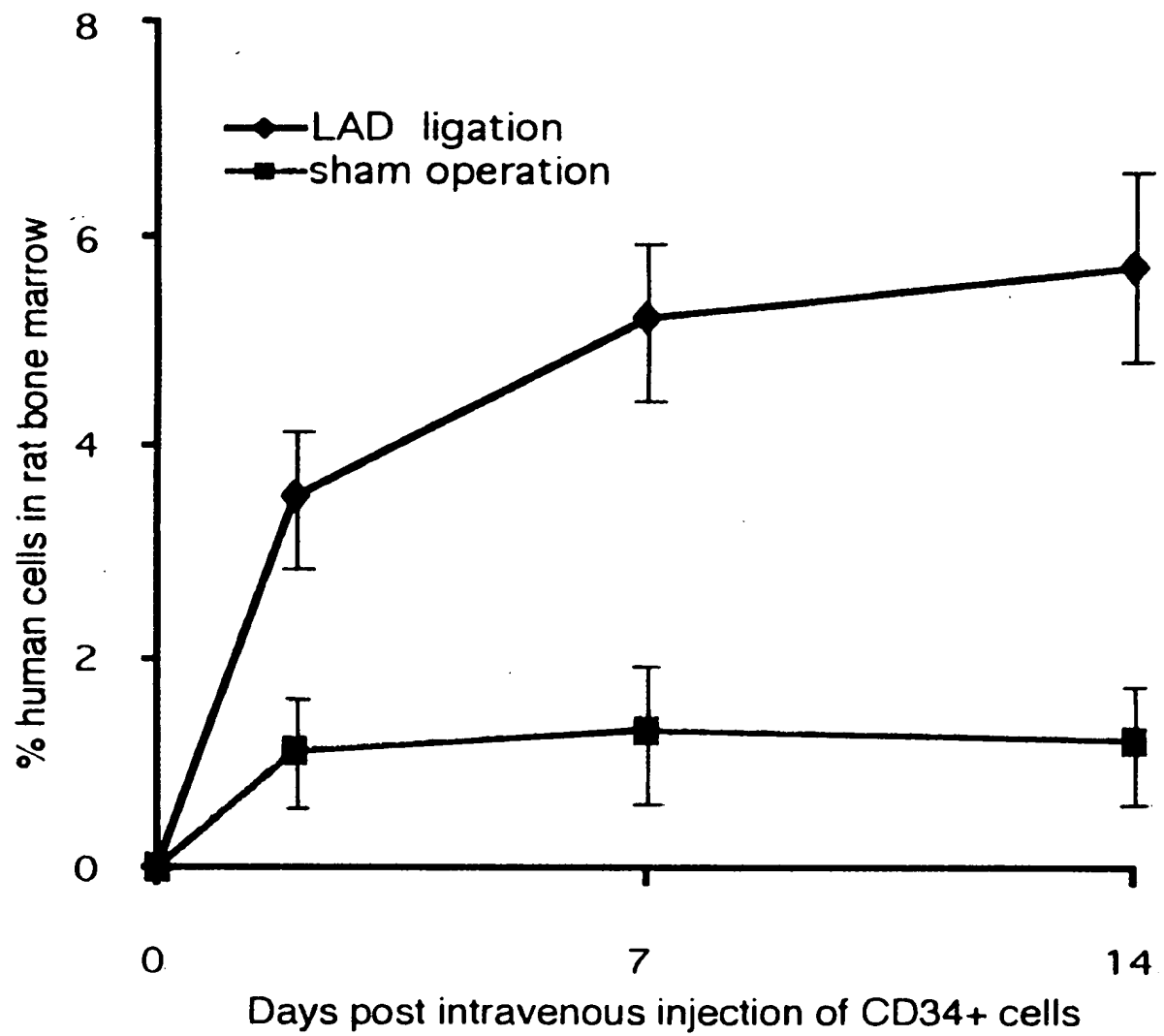
FIGURE 2A

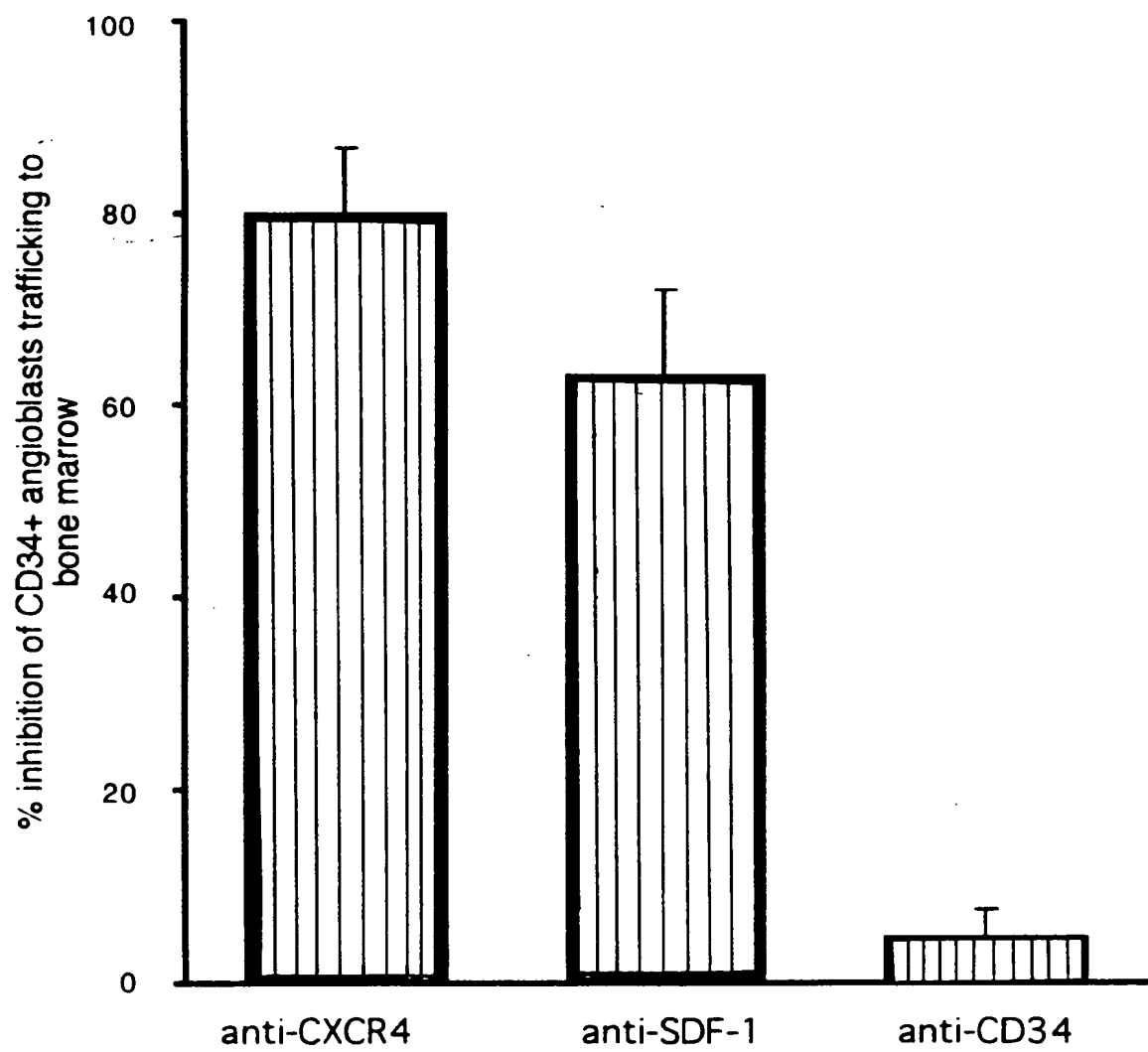
FIGURE 2B

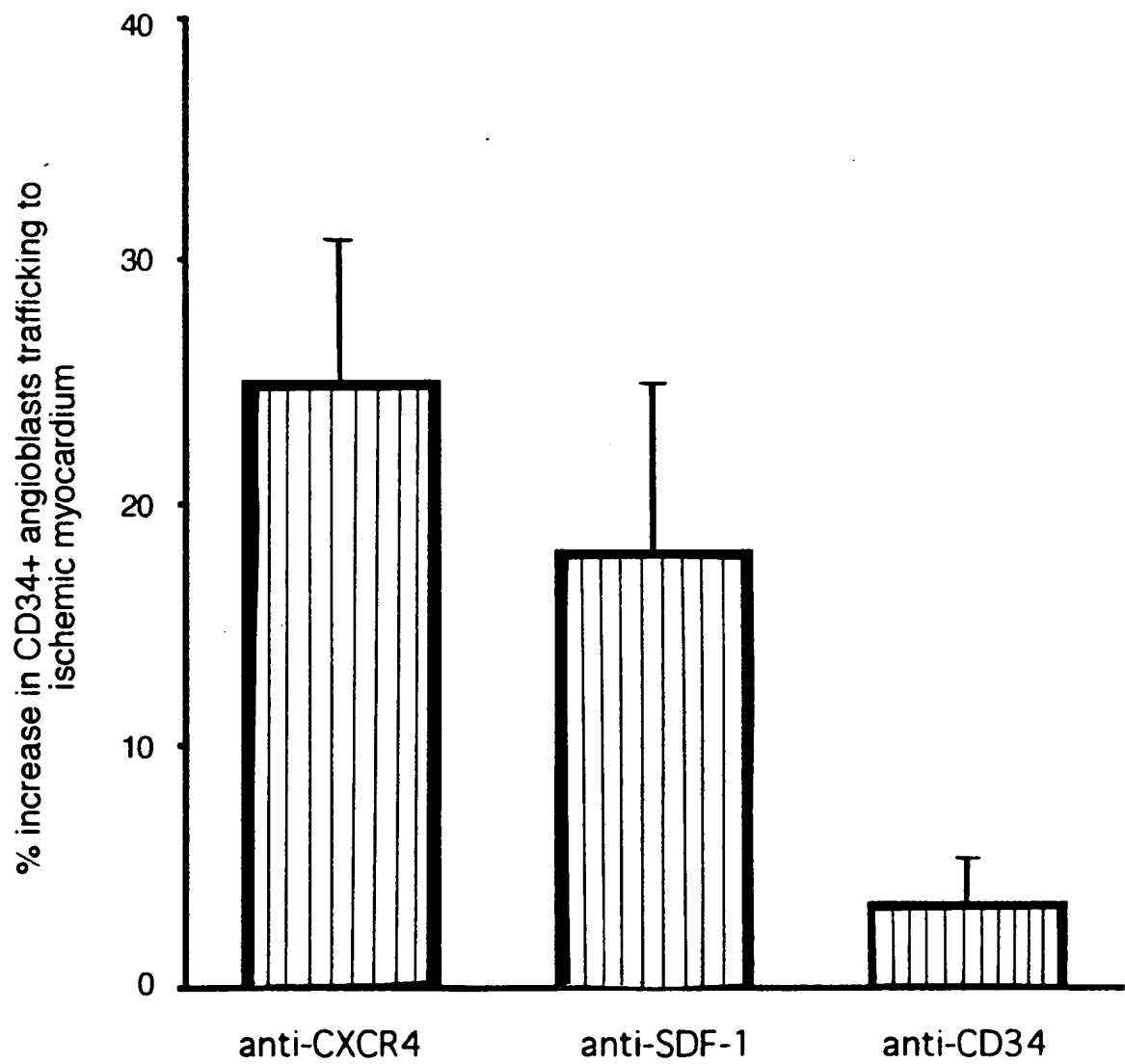
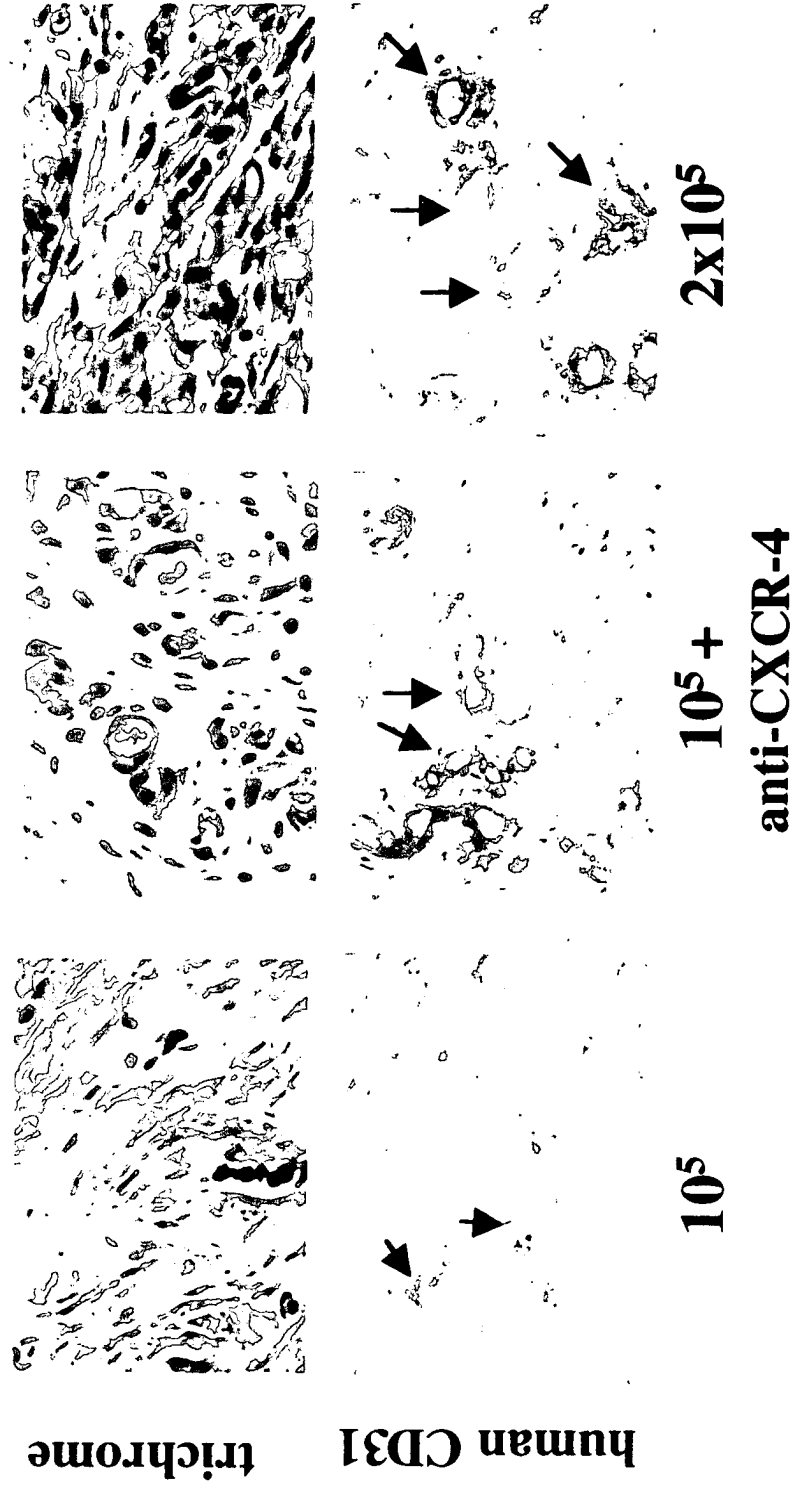
FIGURE 2C

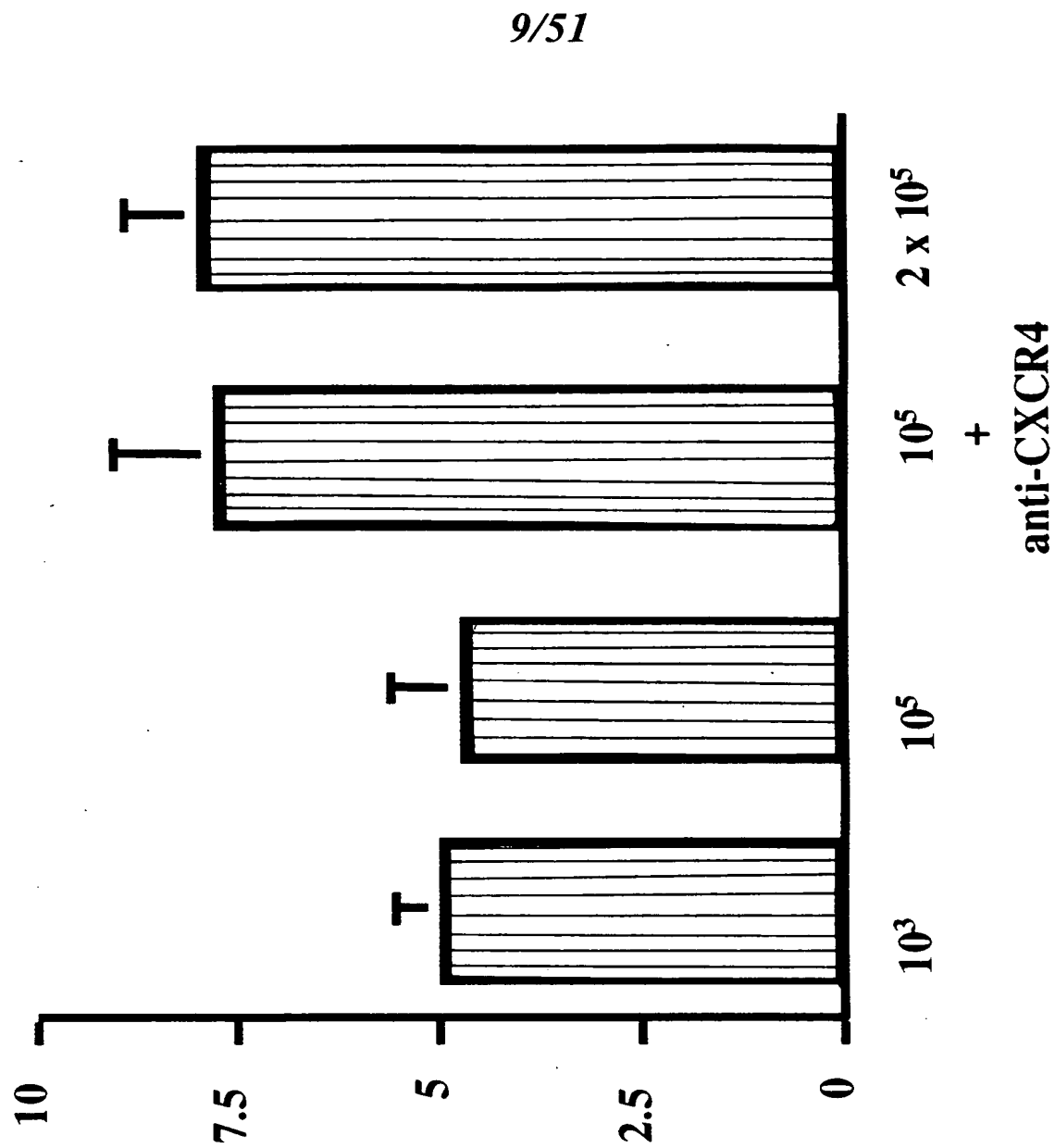
FIGURE 3A



angioblast concentration (cells/mm³)

FIGURE 3B

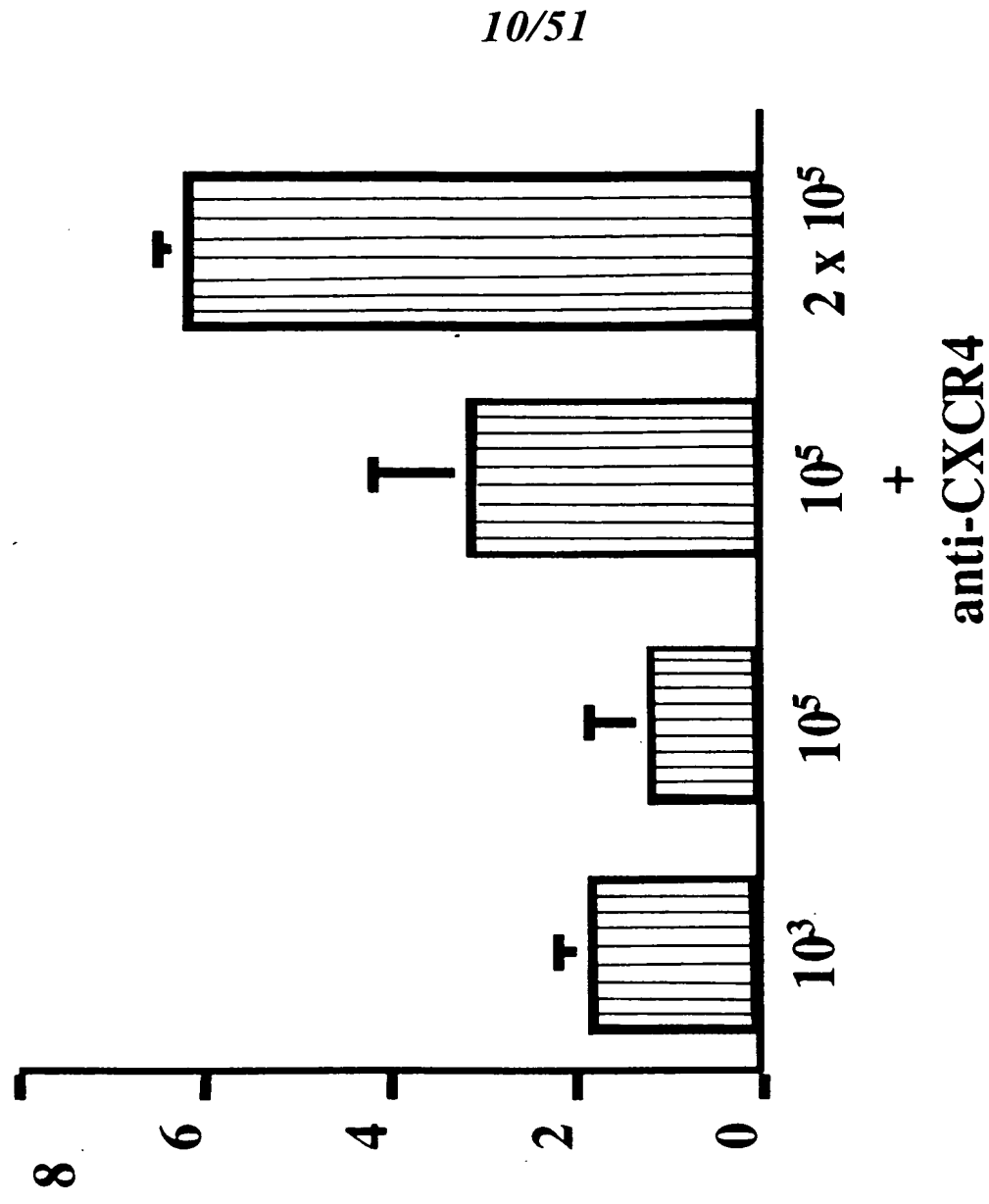
number of medium-diameter vessels
(3-6 nuclei) per high power field



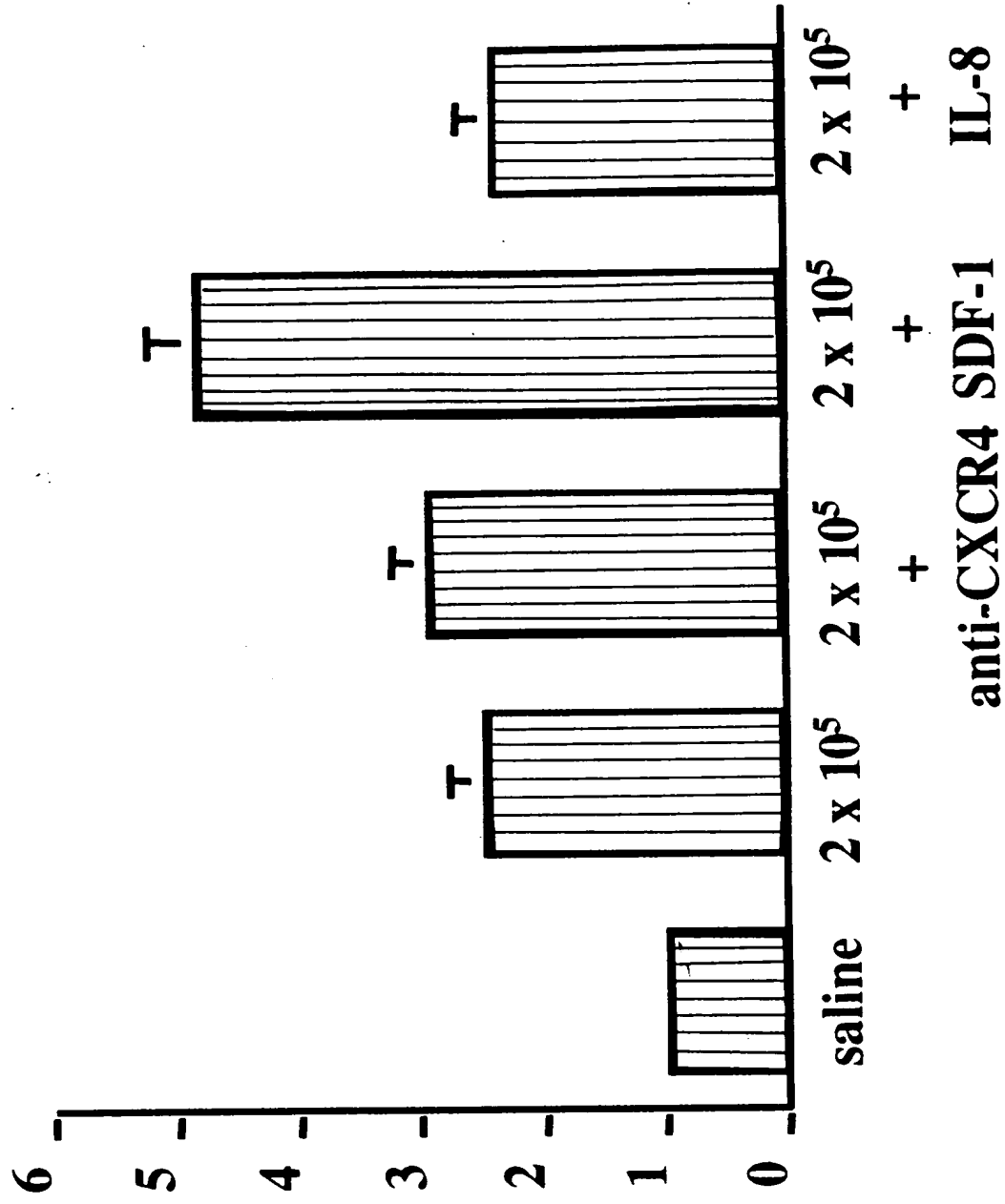
angioblast concentration (cells/mm³) and condition

FIGURE 3C

**number of large-diameter vessels
(>6 nuclei) per high power field**

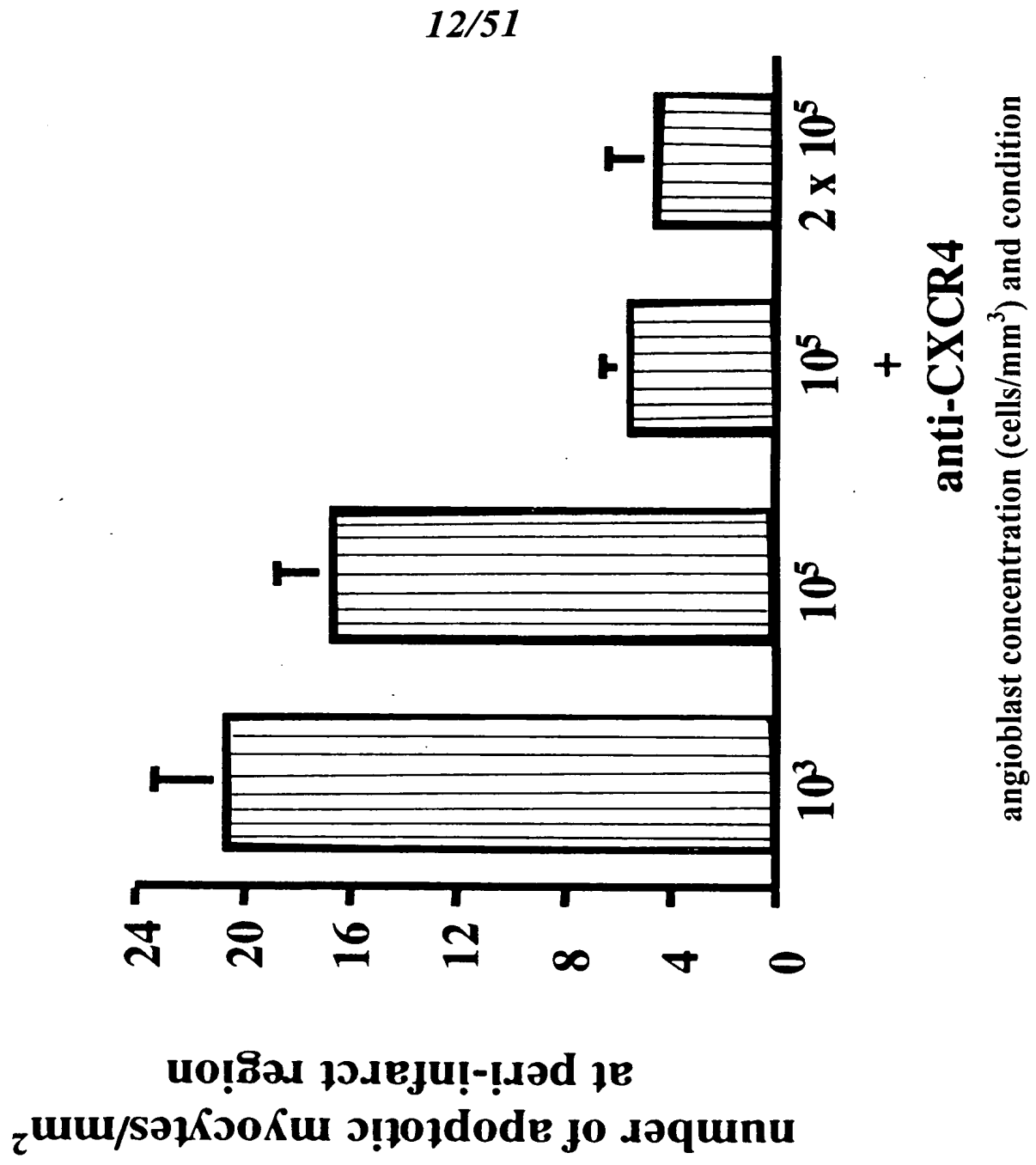


angioblast concentration (cells/mm³) and condition



angioblast concentration (cells/mm³) and condition

FIGURE 3E



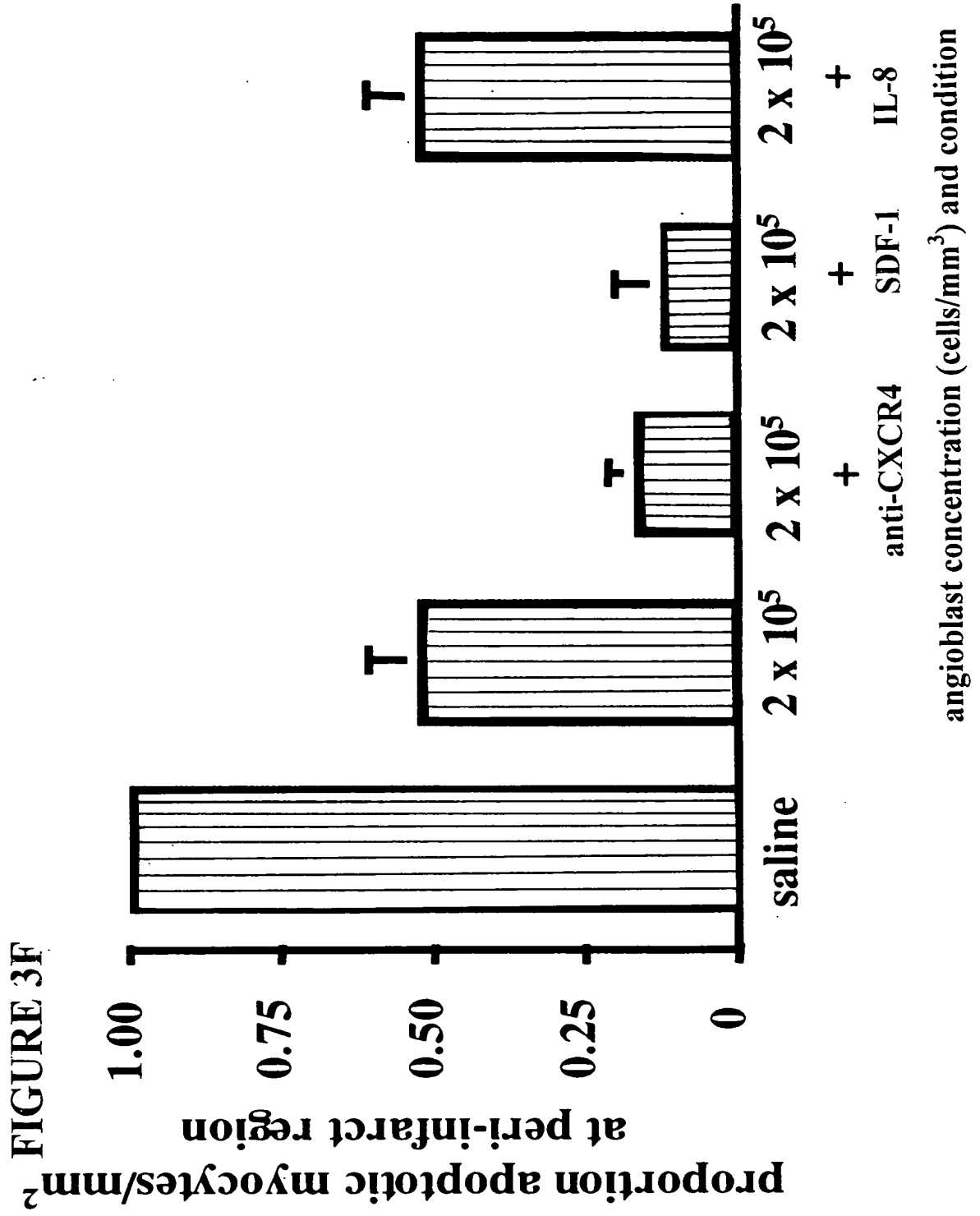


FIGURE 4A

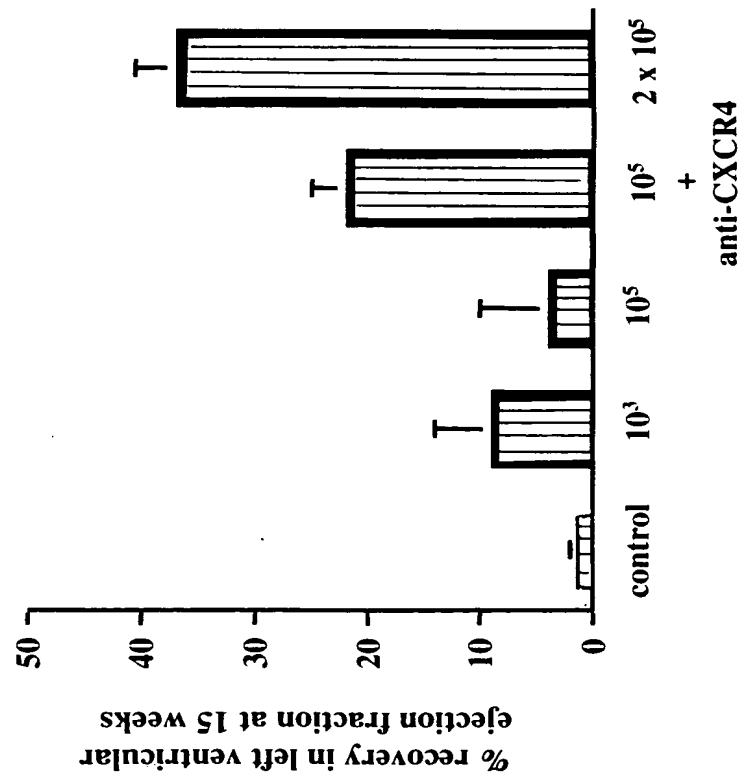
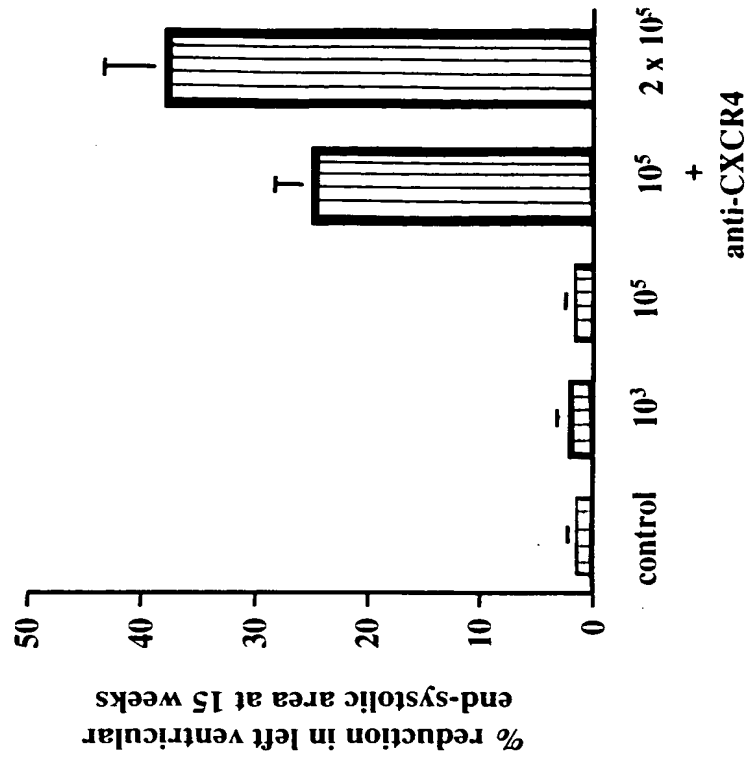


FIGURE 4B



angioblast concentration (cells/mm³) and condition

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FIGURE 4C

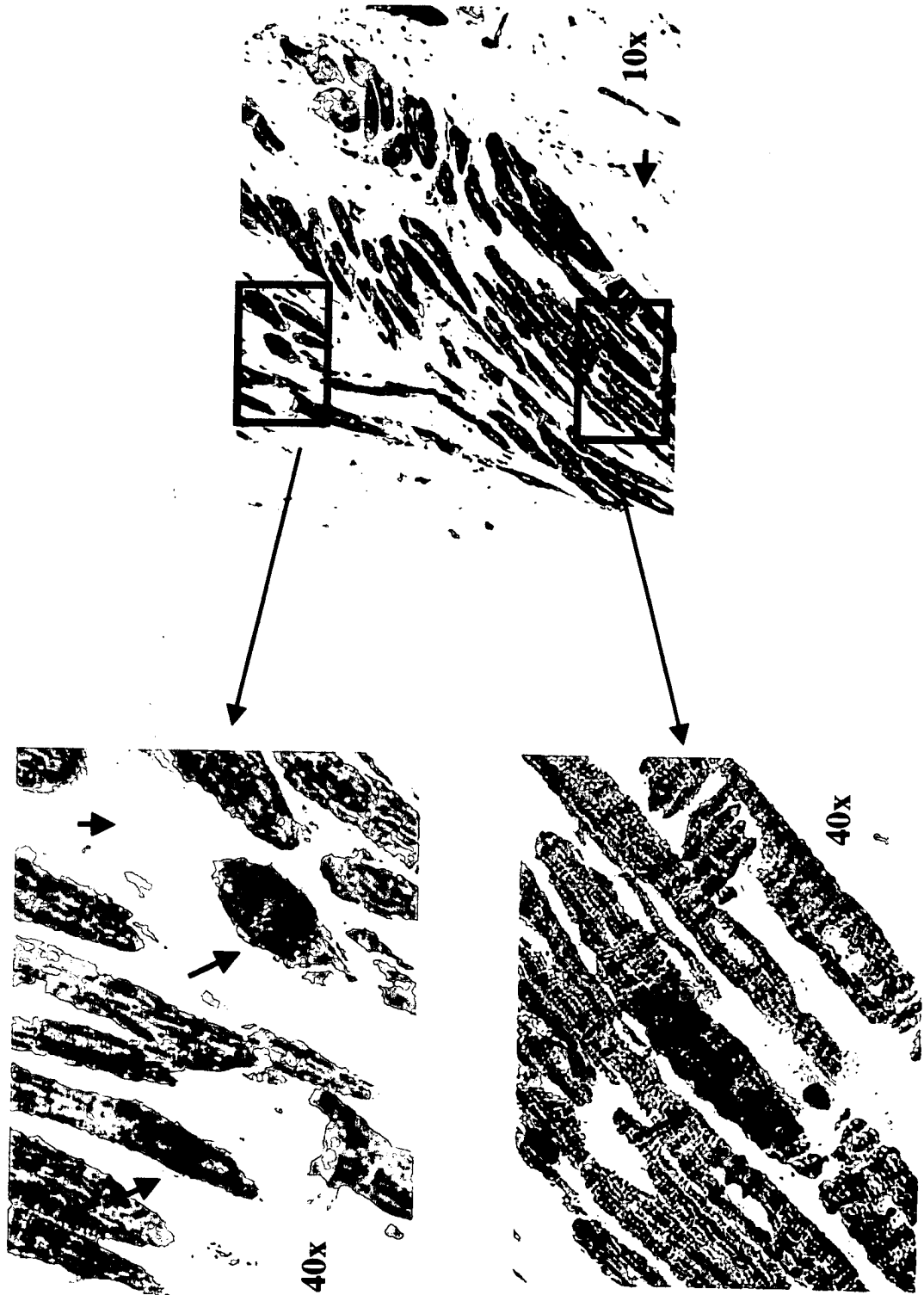
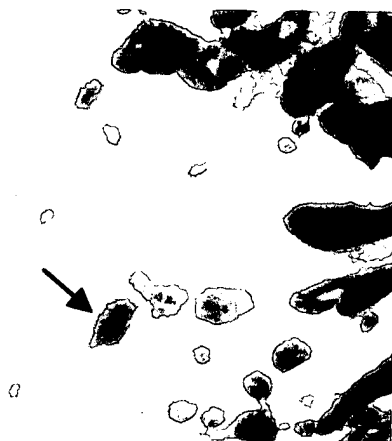


FIGURE 4D

2 x 10⁵ angioblasts



saline



2 x 10⁵ angioblasts



rat MHC class I

dual staining for rat Ki-67 (blue) and troponin I (brown)

fold increase in proportion of rat cardiomyocytes entering cell cycle relative to normal rat heart

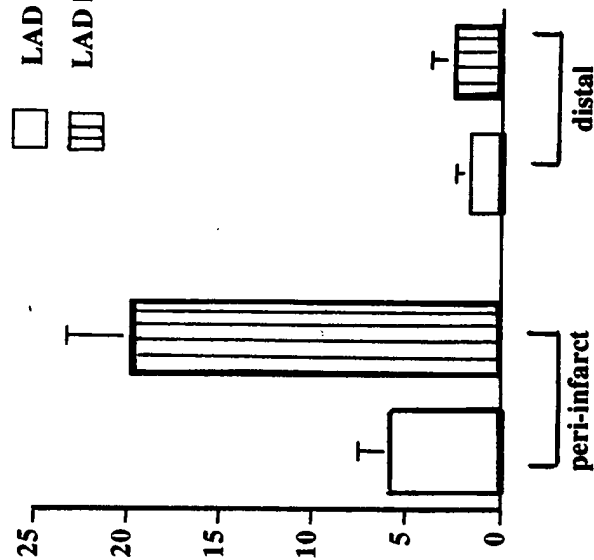


FIGURE 4E

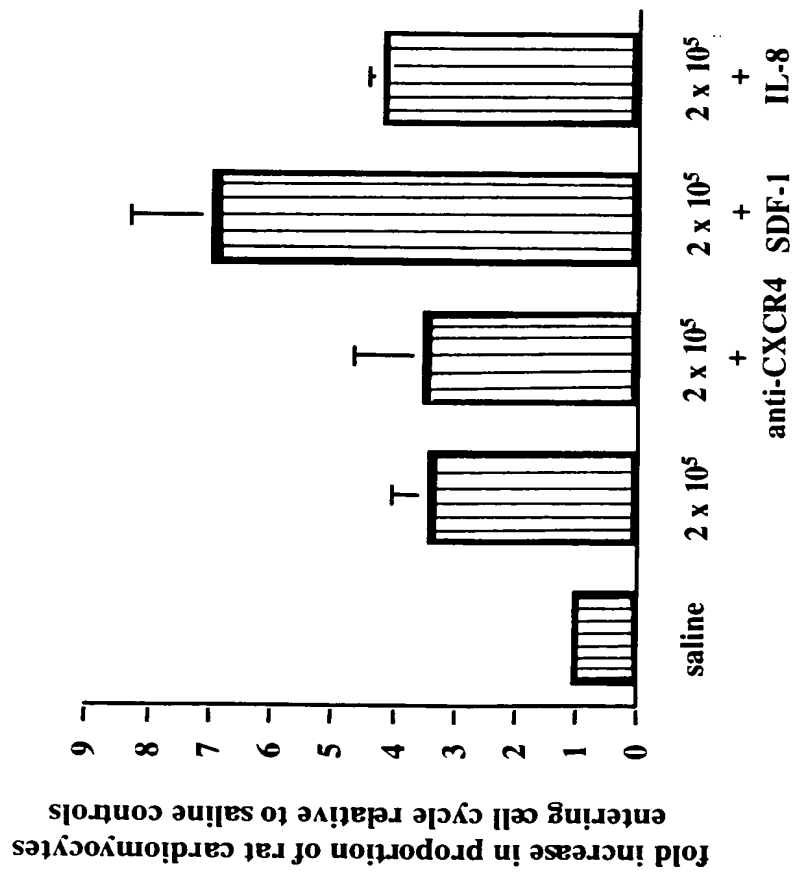
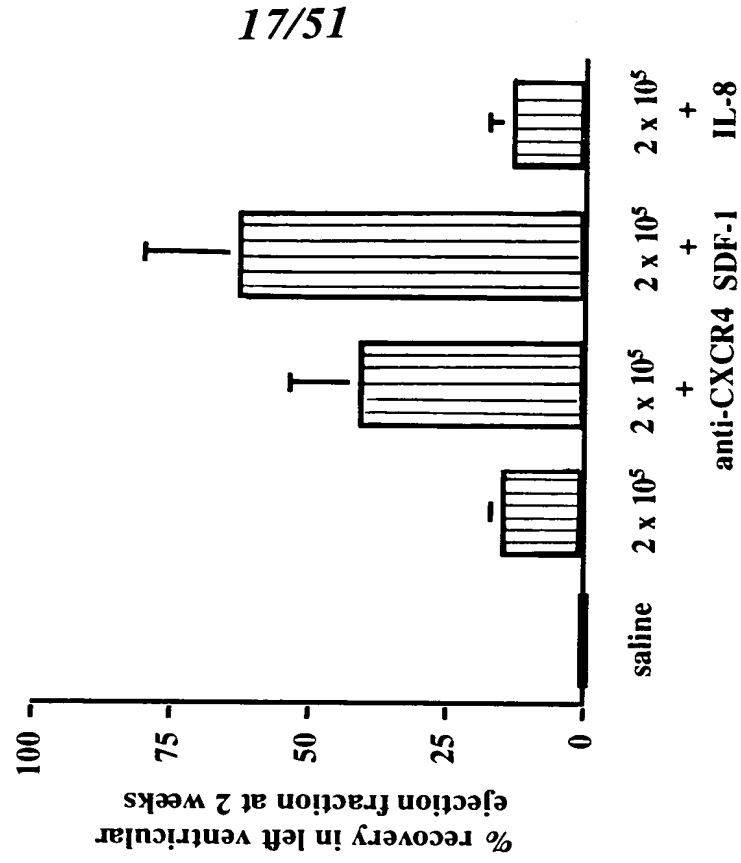
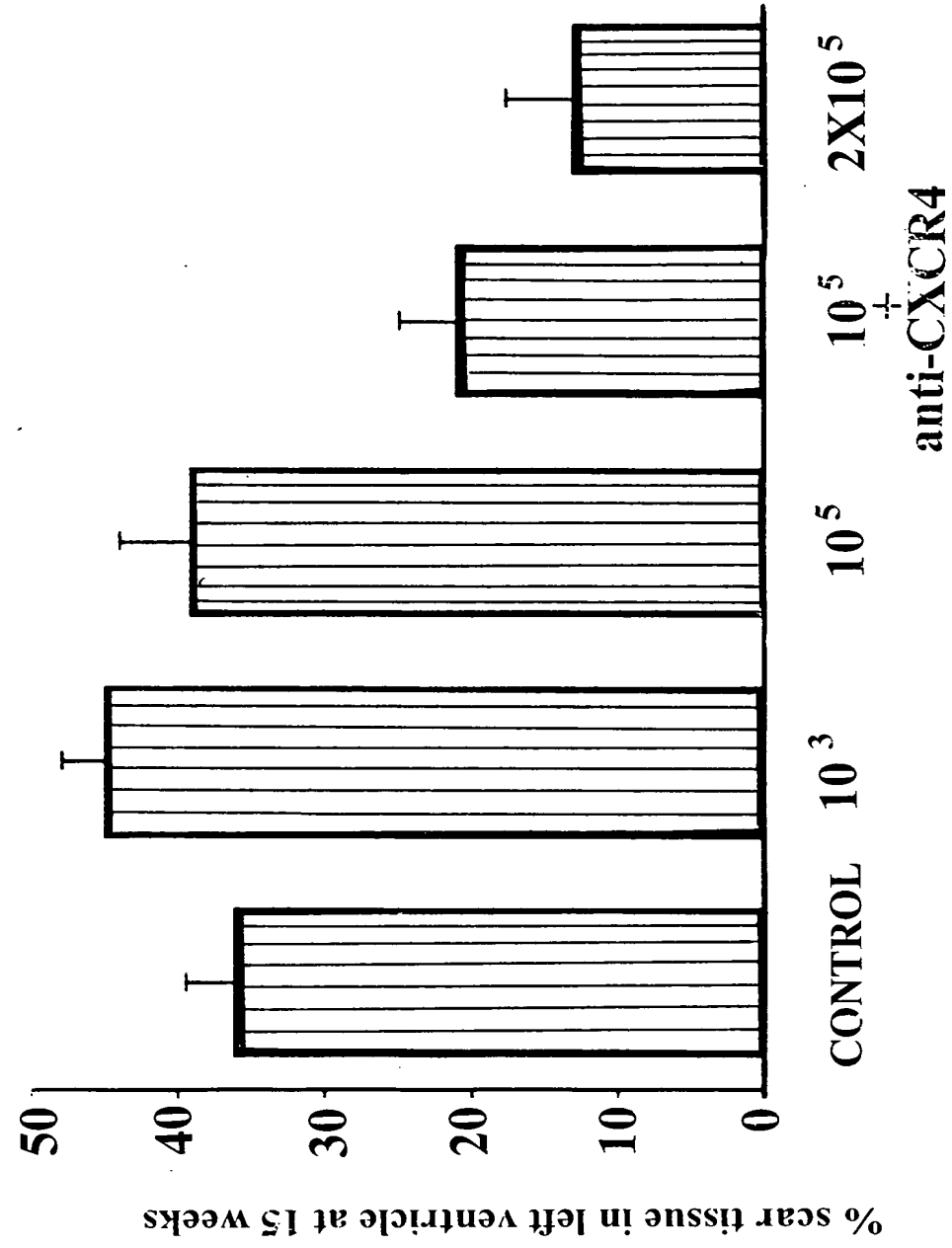


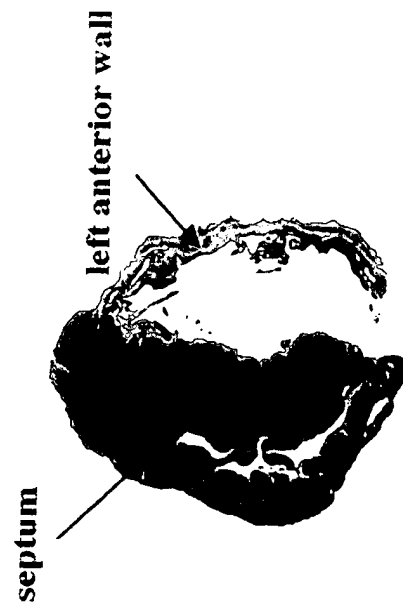
FIGURE 4F



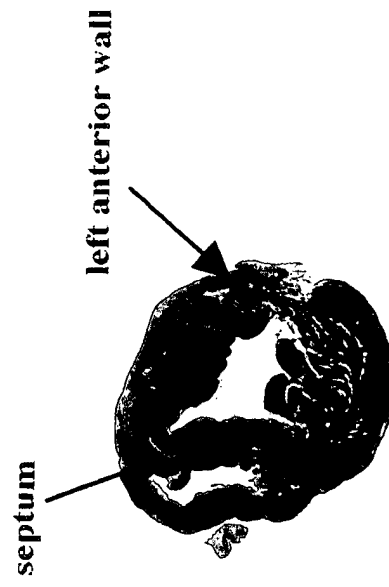


angioblast concentration (cells/mm³) and condition

FIGURE 4H



10^3 angioblasts



2×10^5 angioblasts

FIGURE 5

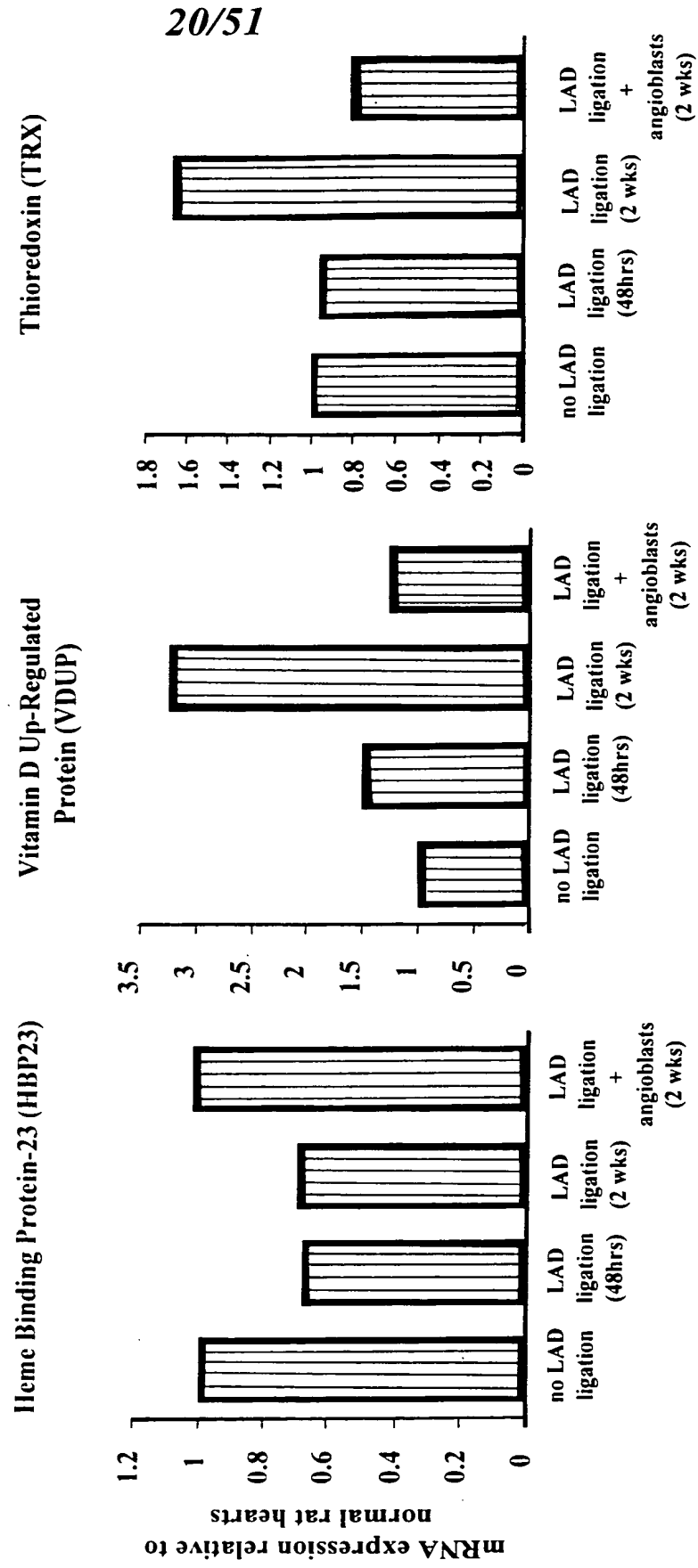


FIGURE 6

```

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121 ttaggcgcct ttctgaaaac ctagttagta atattcattt gtttaaattc tattttattt
181 ttaagctcaa actgcttaag aataccttaa ttctttaaag tgaaataatt ttttgcaaag
241 gggtttcctc gatttggagc ttttttttcc ttccaccgtc atttctaact cttaaaacca
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2281 cttagcactt taattcctgt caaatttttt gttctccctt tctgccatct taaatgtaag
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2641 cactgcagct gccagcactt ggtcagtcac tctcagccat agcactttgt tcaactgtcct
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2761 gaagatgggt ggtttcatgt

```

FIGURE 7

```

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421 tgaagttact cgtgtcaaag ccgttaggAT cctggcttgc ggagtggcta aagtgccttg
481 gATgcaggga Tcccagcagt gcaaacagac ttcggagtag ctgcgctATg aagacacgct
541 tcttctggaa gaccagccaa caggtgagaa TgagATggtg ATcATgagac ctggaaacaa
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661 aaaATATggg tgtgtagact actgggtgaa ggcttttctt gaccgcccga gccagccaac
721 tcaagagaca aagaaaaact ttgaagtagt ggATctggtg gATgtcaATa cccctgATtt
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841 gcgggtgtct gtctctgctc gaATtgacag aaaaggATtc tgtgaagggtg ATgagATttc
901 cATccATgct gactttgaga ATacATgttc ccgaATTgtg gtccccaag ctgccATtgt
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1321 TgtcATtcct gaagATcacc gATTggagag cccaaccact cctctgctag ATgacATggA
1381 Tggctctcaa gacagccctA TctttATgtA Tgccccctgag ttcaaagttcA Tgccaccacc
1441 gacttATact gaggtggATc cctgcATcct caacaacaAT gtgcagtgga

```

FIGURE 8

```

314      atggtga      tgttcaagaa      gatcaagtct      tttgagggtgg      tctttaacga
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421      tgaagttact      cgtgtcaaaG      Ccgttaggat      cctgGcttGC      aagtGctttg
481      gatGCaggga      tcccaGCagt      GCaacagac      ttcggagtag      ctGGCtatg      aagacacGct
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601      atatgagtac      aagttcgGct      ttgaGcttcc      tcagggGCct      ctgggaacat      ccttcaaagg
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721      tcaagagaca      aagaaaaact      ttgaagtagt      ggatctggtg      gatgtcaata      cccctgattt
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1381      tgGctctcaa      gacaGCccta      tctttatgta      tGCCcctgag      ttcaagttca      tGCcaccacc
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```

FIGURE 9

```

314      atgGTga  tGttcaagaa  gatcaaGTct  tttgagGTgG  Tctttaacga
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541  tcttctggaa  gaccagccaa  cagGTgagaa  tgagatgGTg  atcatgagac  ctggaaaacaa
601  atatgaGTac  aAGTtcggct  ttgagcttcc  tcaggggcct  ctgggaacat  ccttcaaaag
661  aaaatatggG  TGTGTagact  actggGTgaa  ggcttttctt  gaccgcccga  gccagccaac
721  tcaagagaca  aagaaaaact  ttgaaGTaGT  ggatctgGTg  gatGTcaata  cccctgattt
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1381 tggctctcaa  gacagcccta  tctttatGTa  tggccctgag  TtcaaGTtca  tgccaccacc
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```


FIGURE 10

```

314          atggtga  tgttcaagaa  gatcaagtct  tttgaggtgg  tctttaACgA
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421  tgaagtTACt  cgtgtcaaag  ccgttaggat  cctggcttgc  ggagtggcta  aagtgccttg
481  gatgcaggga  tcccagcagt  gcaaACagAC  ttcggagtAC  ctgcgctatg  aagACACgct
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601  atatgagtAC  aagttcggct  ttgagcttcc  tcaggggcct  ctgggaACat  ccttcaaagg
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1381 tggctctcaa  gACagcccta  tctttatgta  tgcccctgag  ttcaagttca  tgccACcACC
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FIGURE 11

314 atggtga tgTTcaagaa gaTcaagTcT TTtgaggTgG TcTTTaacga
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 1321 tgTcaTTcct gaagaTcacc gaTtggagag cccaaccact ccTctgcTag atgacatgga
 1381 tggcTcTcaa gacagcccTa TcTTtatGTa tgccccctgag TTcaagTTca tgccaccacc
 1441 gacTTaTact gaggtggaTc cctgcaTcct caacaacaat gtgcagTga

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FIGURE 12

DNAzyme conc.		0.05 μ M			0.5 μ M			5 μ M						
time (mins)	0	5	60	120	0	5	20	60	120	0	5	20	60	120

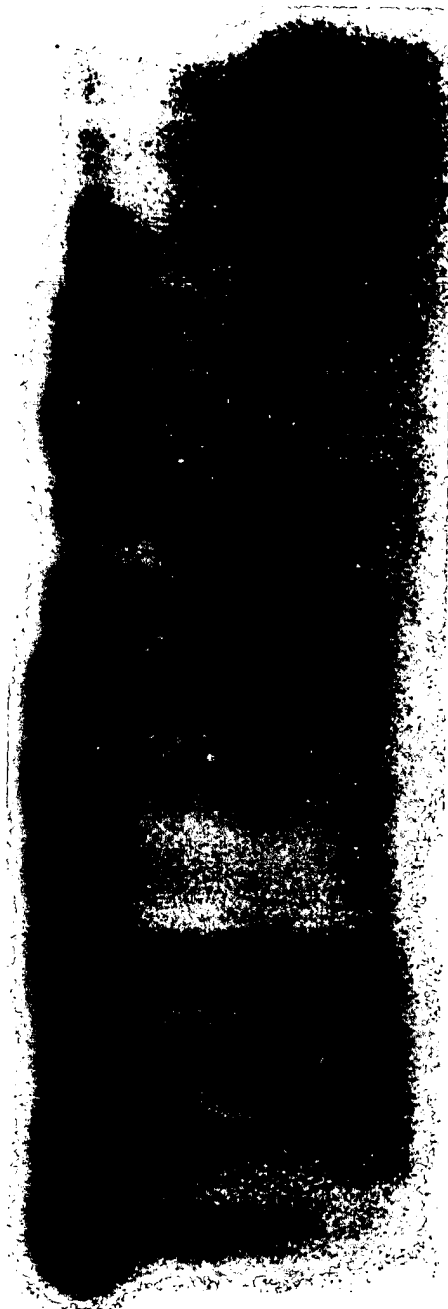


FIGURE 13A

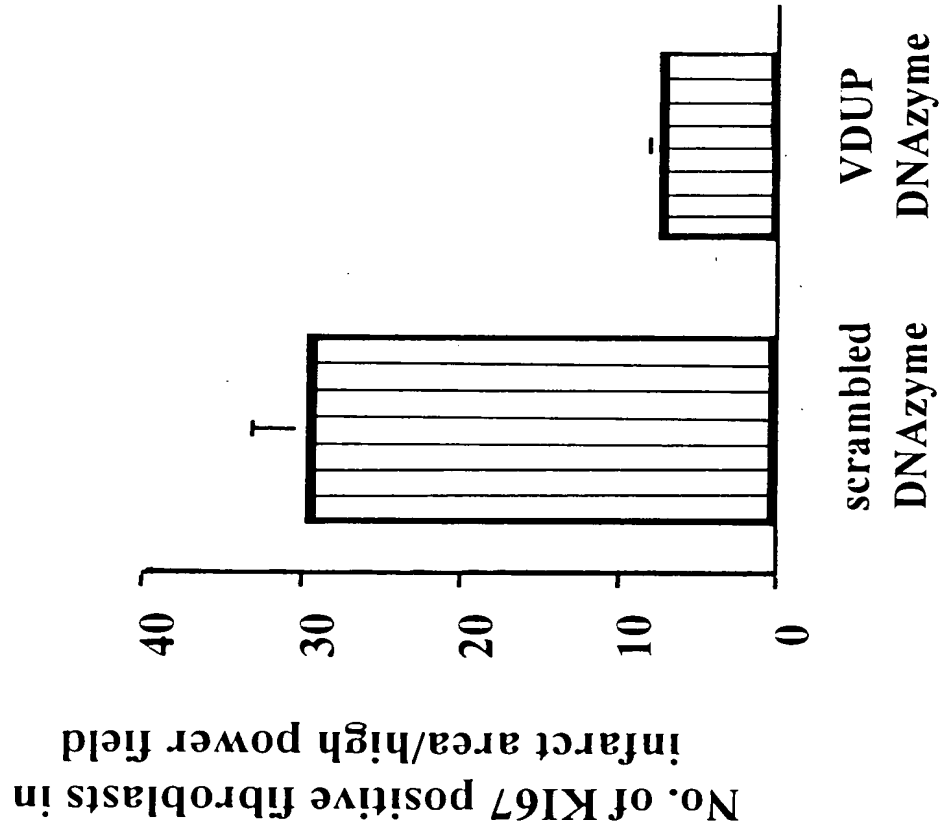


FIGURE 13B

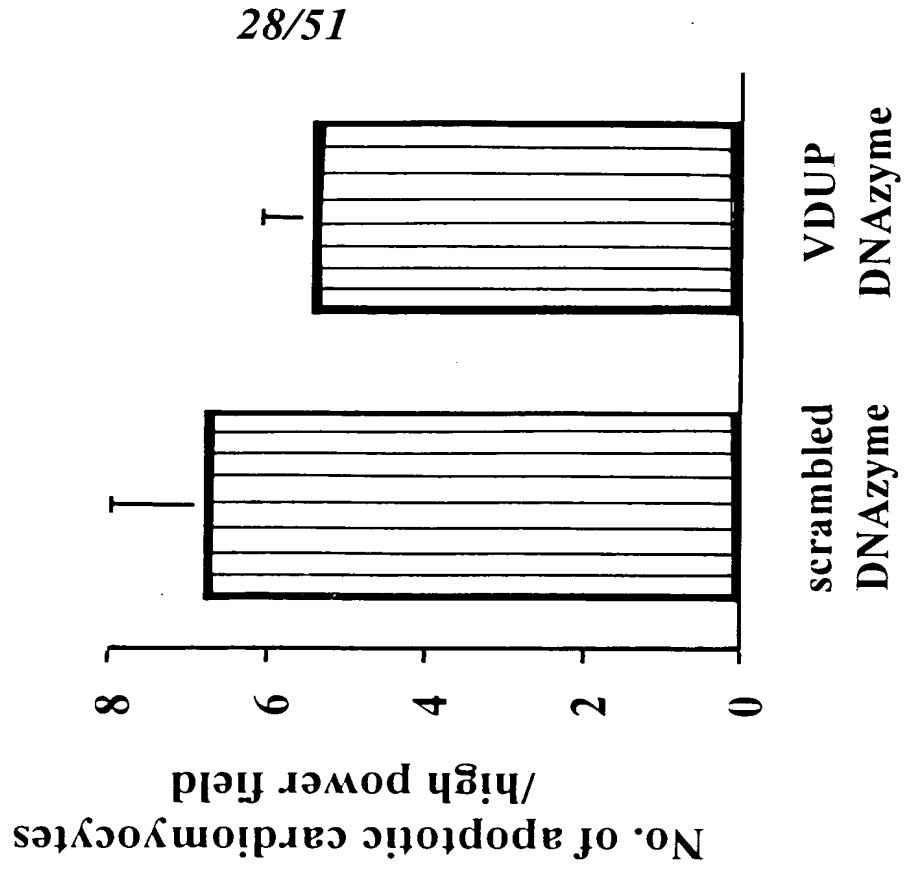


FIGURE 14A

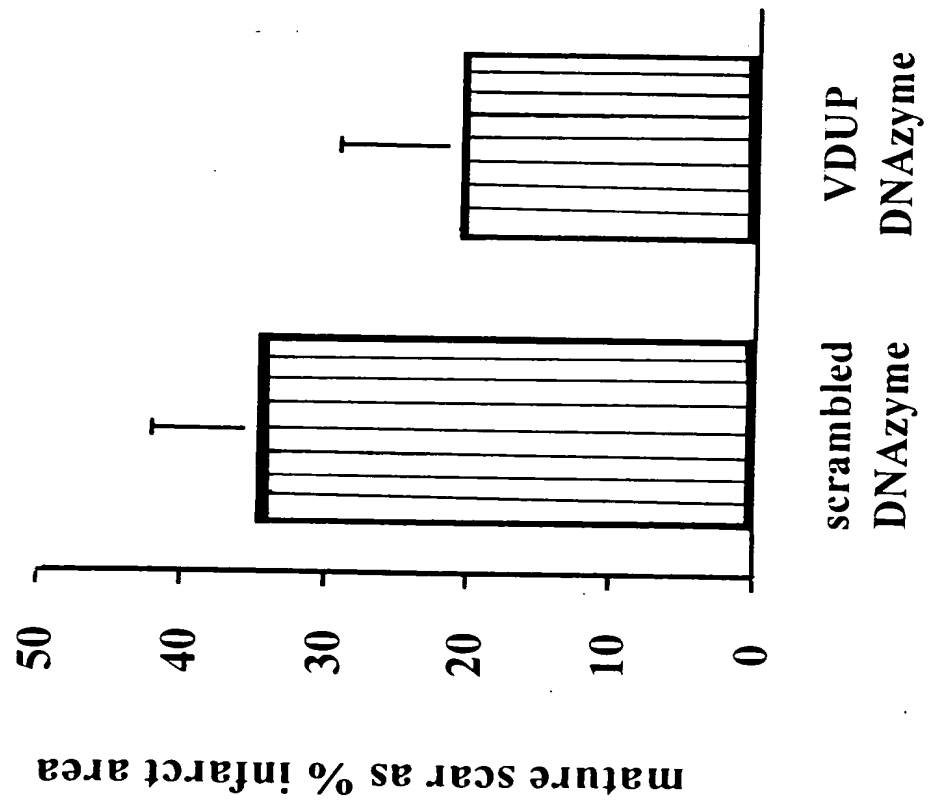


FIGURE 14B

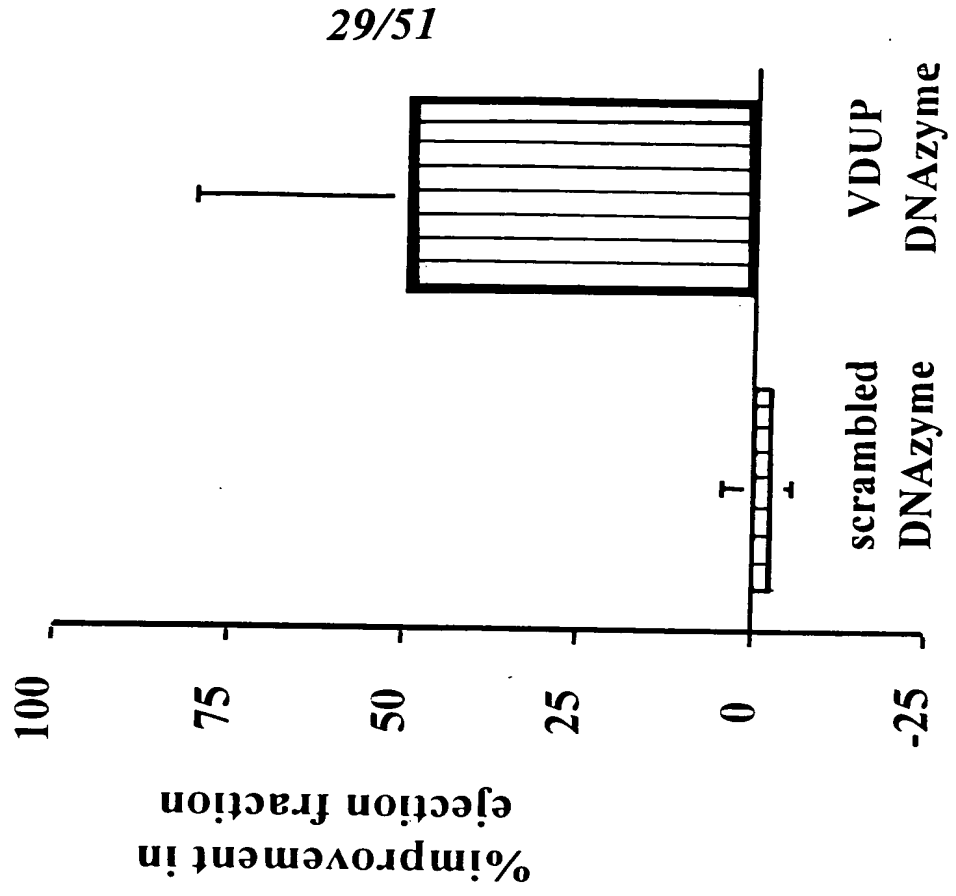


FIGURE 15A

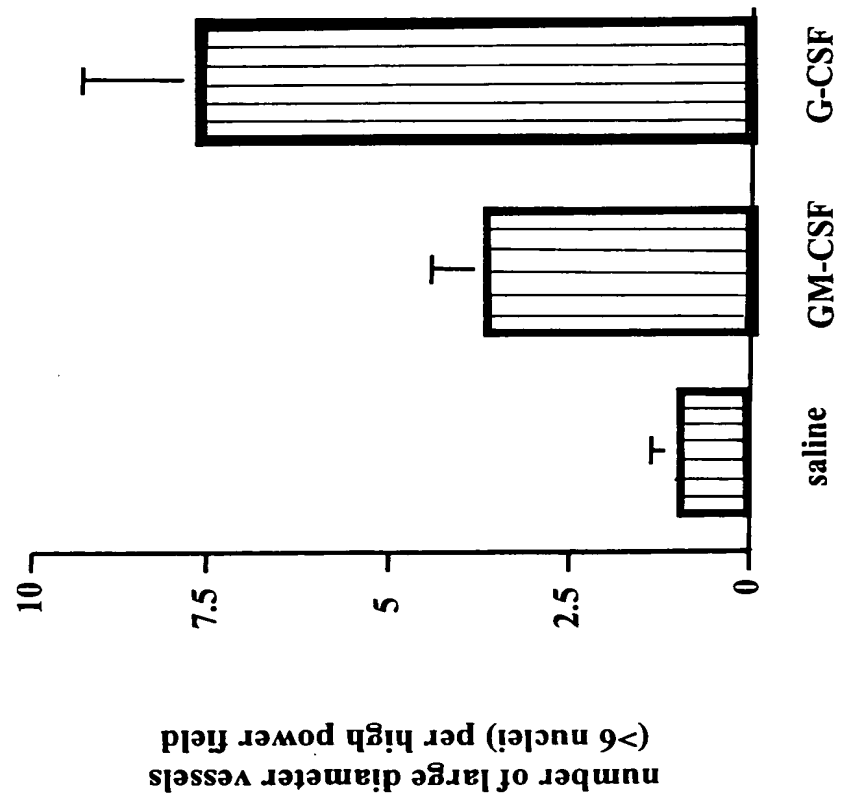


FIGURE 15B

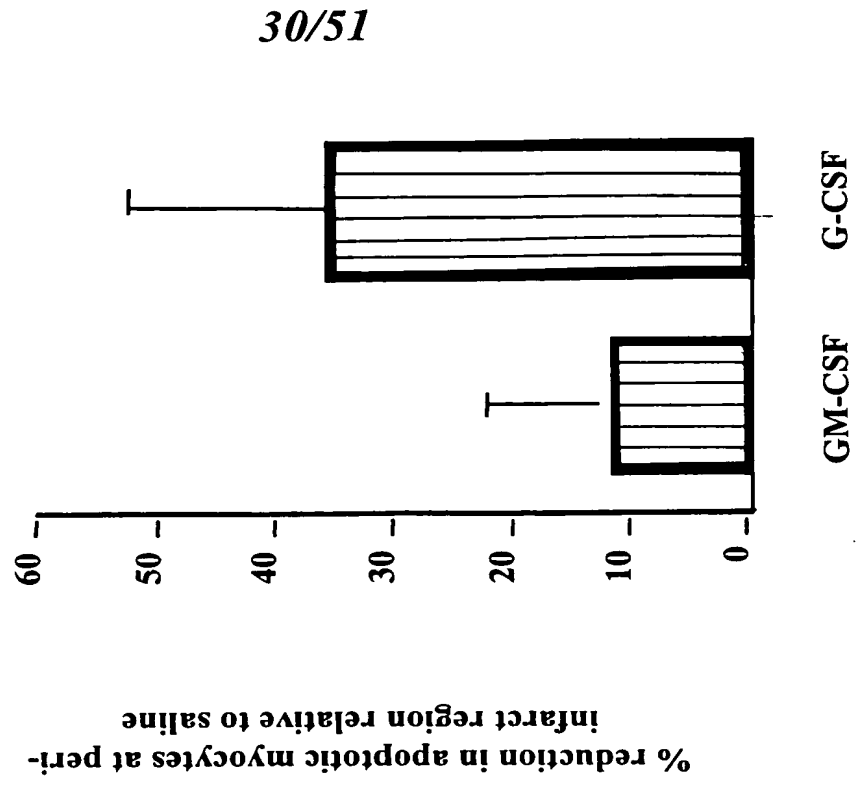


FIGURE 16A

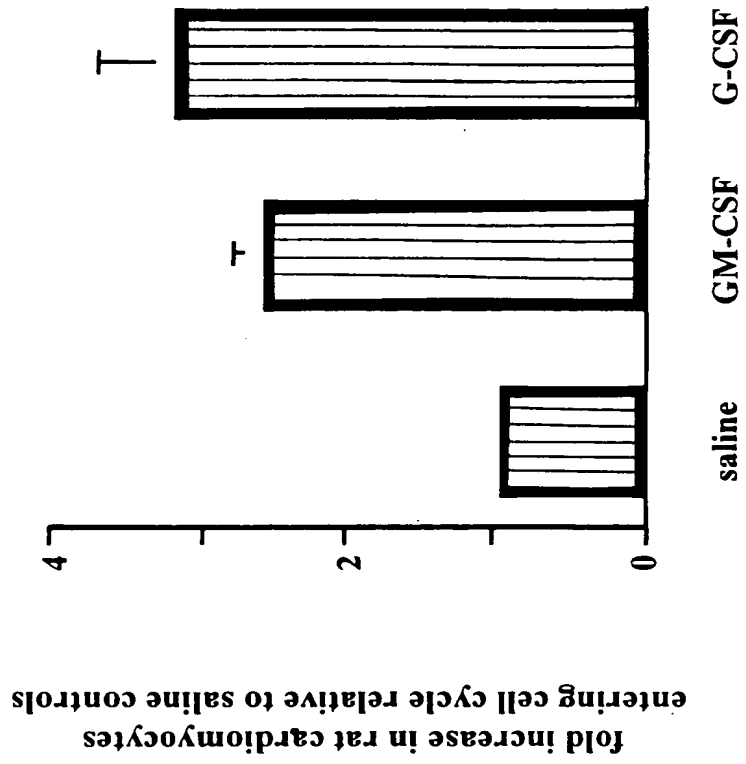


FIGURE 16B

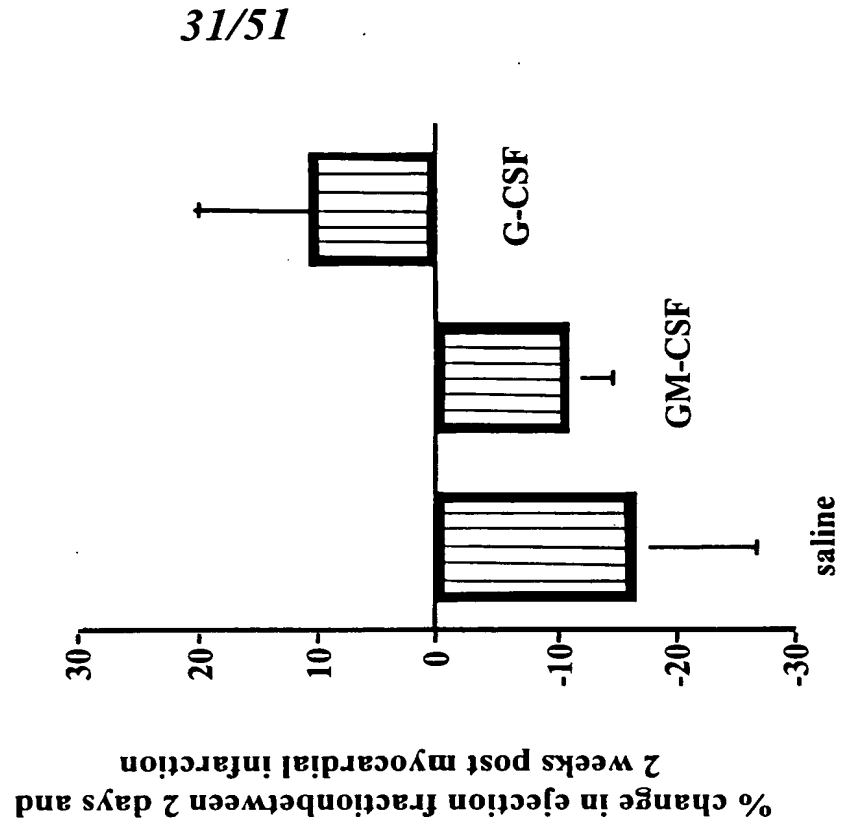


FIGURE 17A

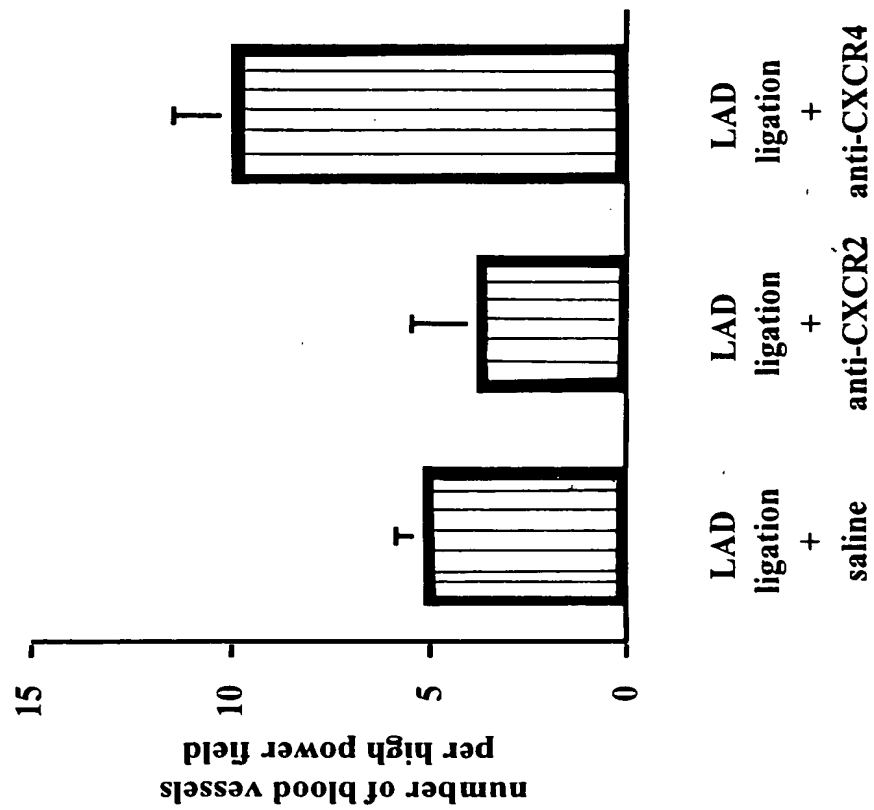


FIGURE 17B

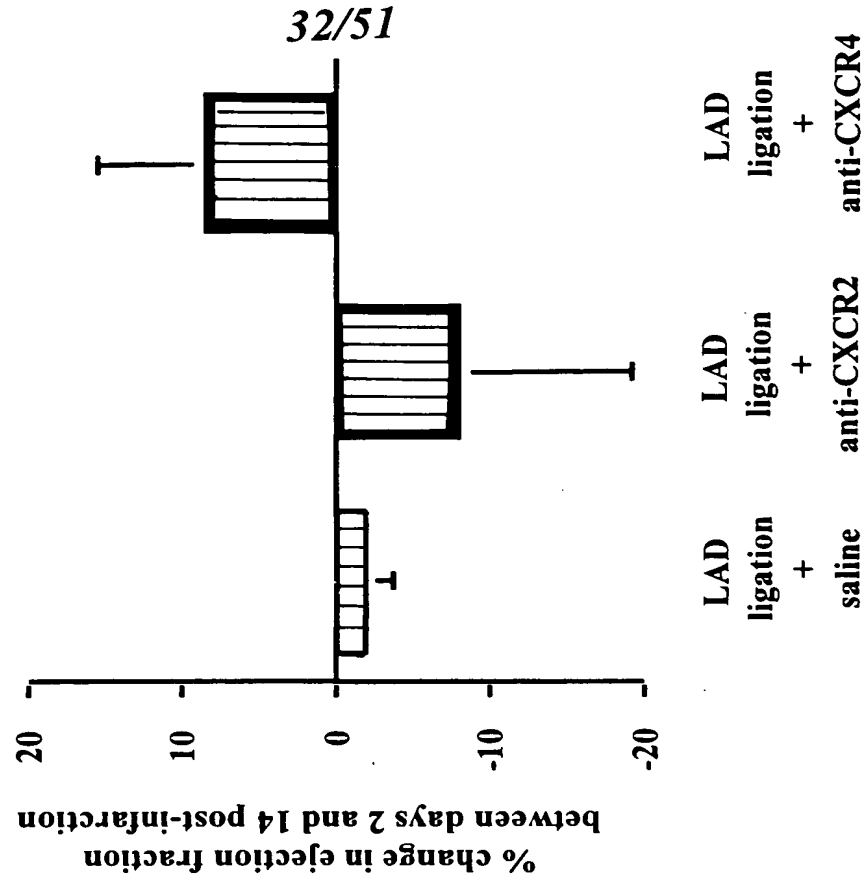


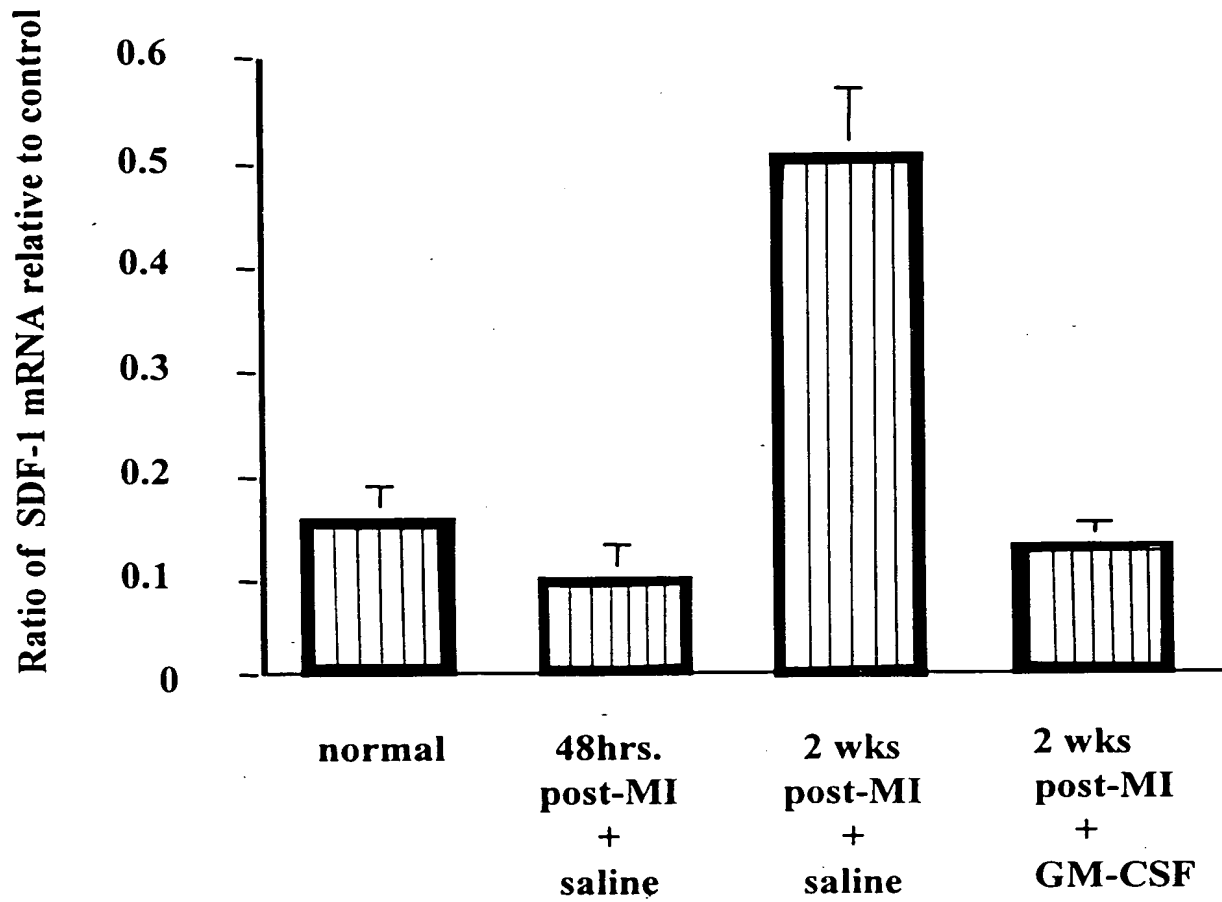
FIGURE 18

FIGURE 19A

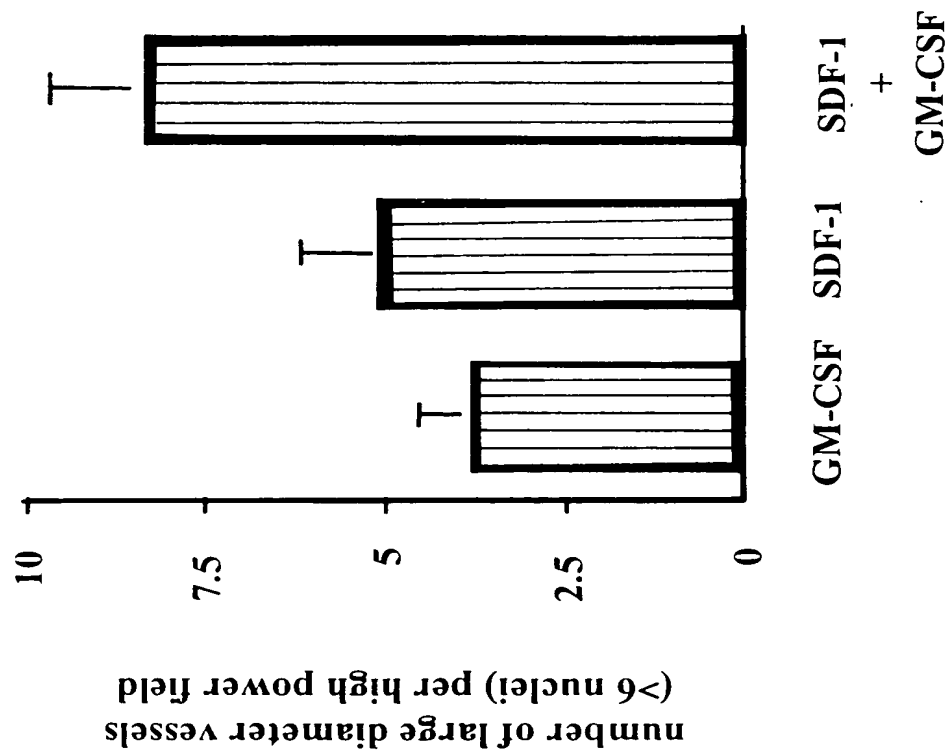


FIGURE 19B

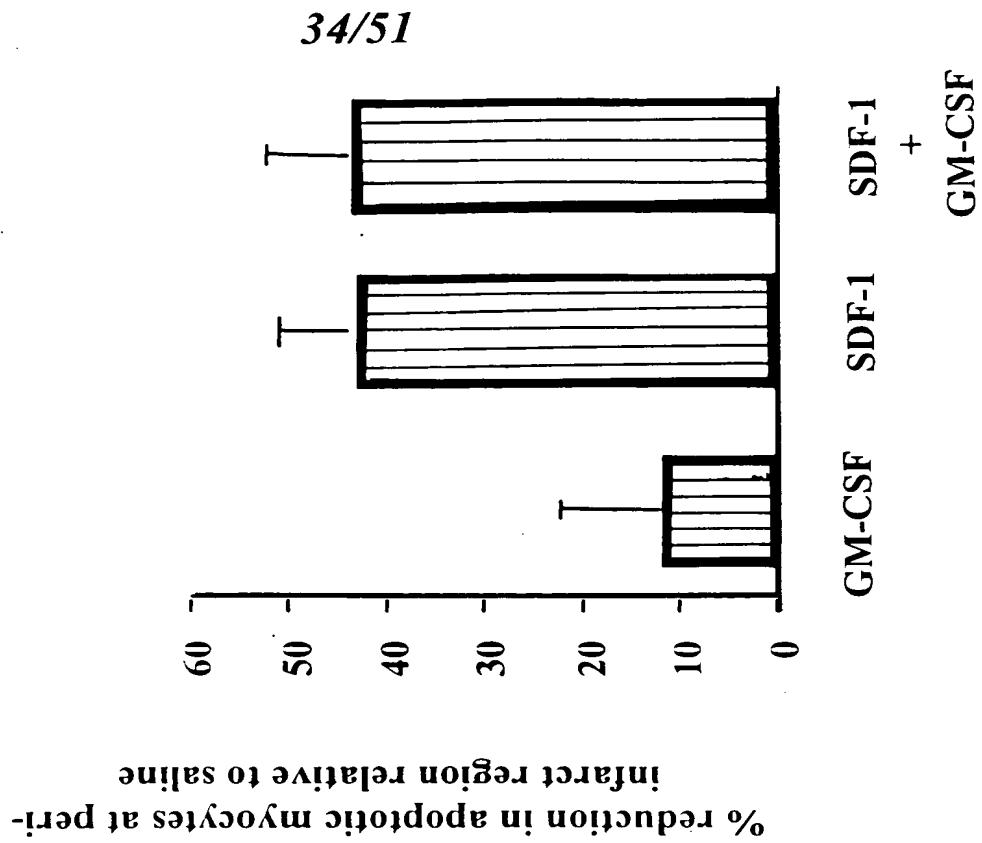


FIGURE 20A



FIGURE 20B

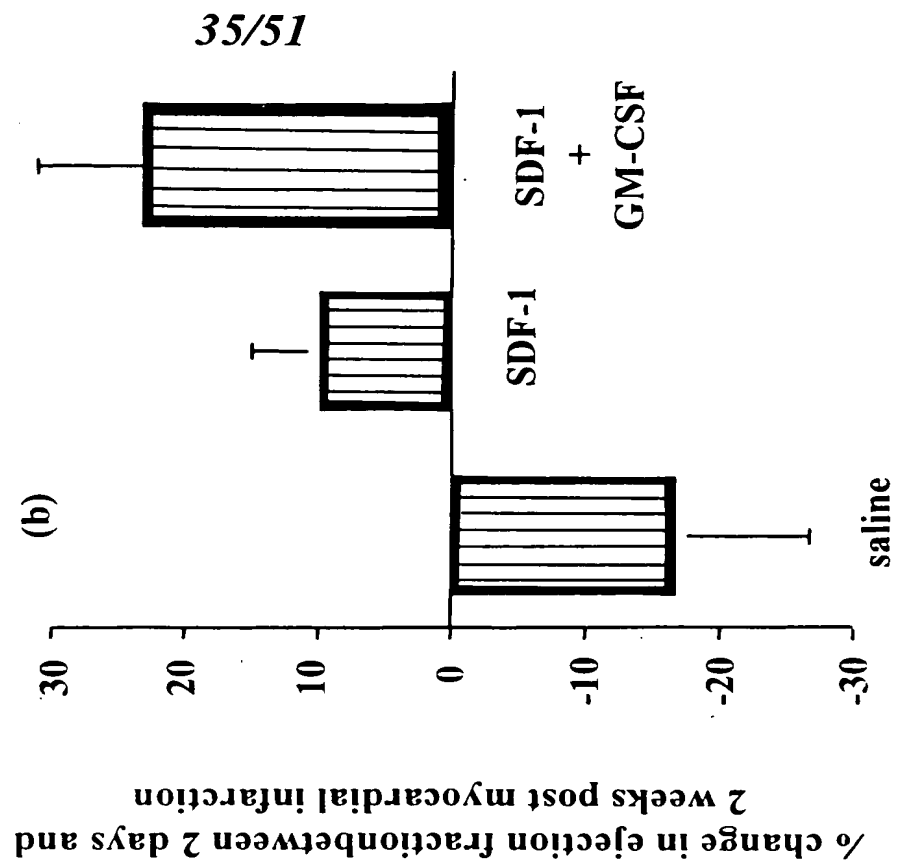


FIGURE 21A

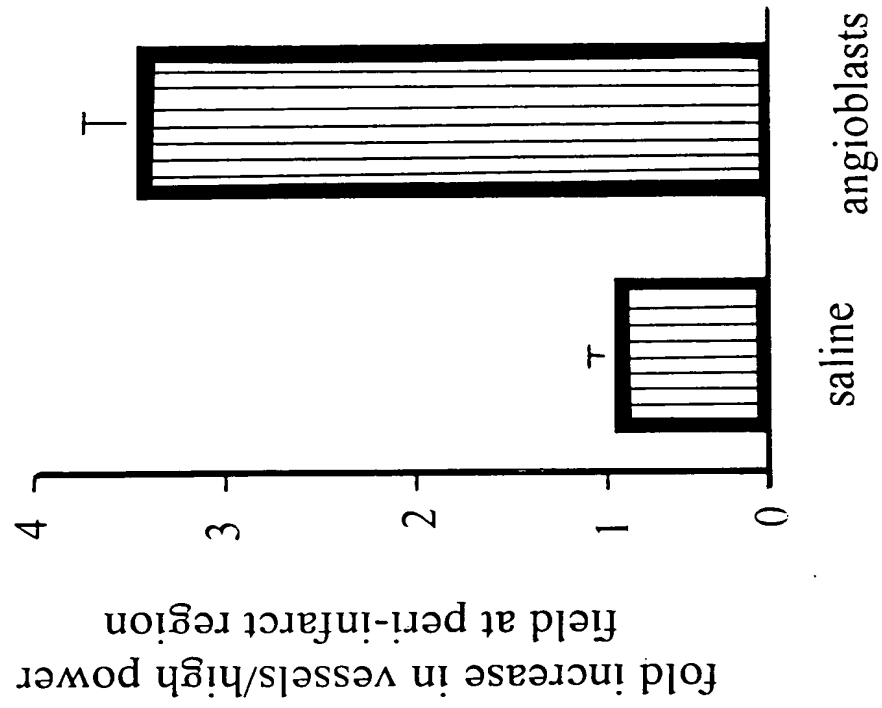


FIGURE 21B

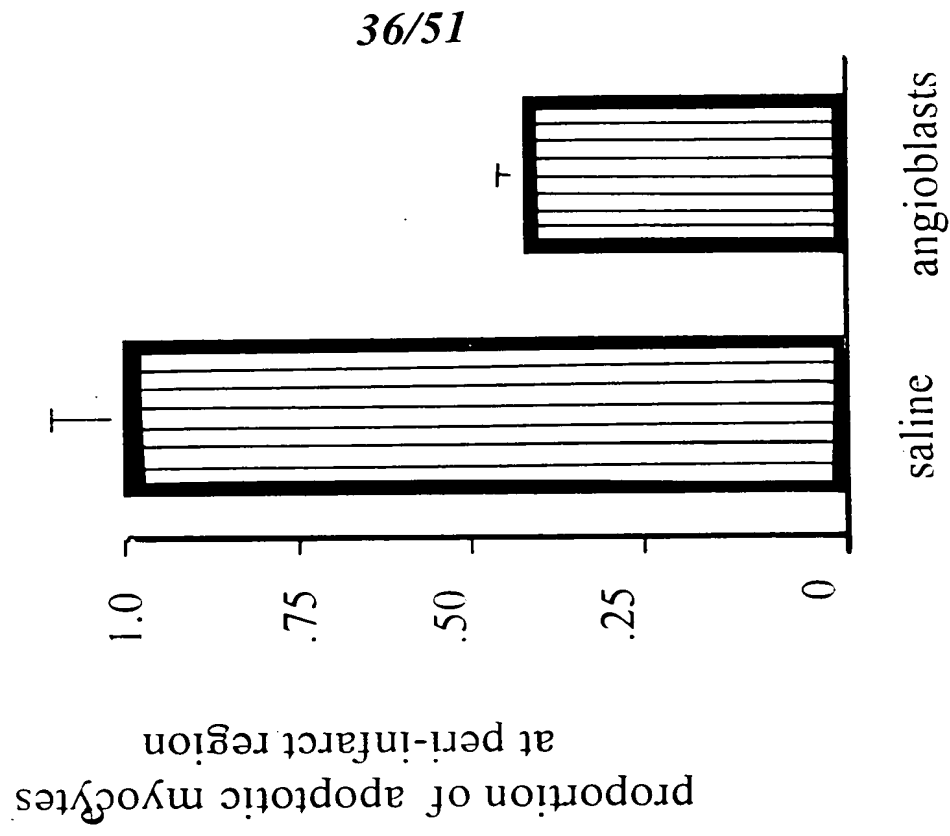


FIGURE 22A**Early Proliferation/ Regeneration Of Immature Cardiomyocyte
Lineage Progenitors Accompanying Neovascularization**

(confocal microscopy: red nucleus, yellow Ki67, blue cytoplasm alpha-sarcomeric actin)

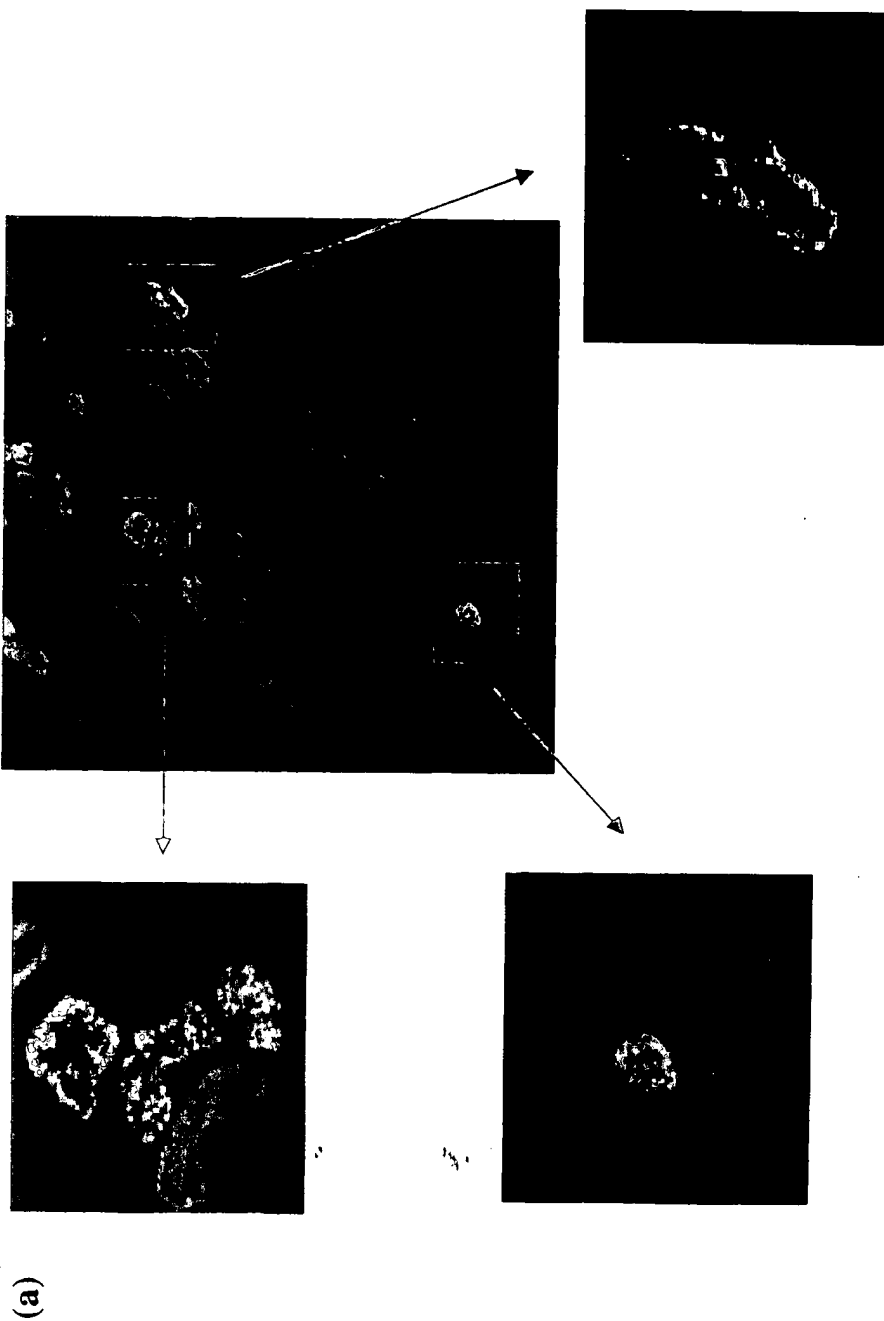


FIGURE 22B

**(b) Later Differentiation And Regeneration Of Mature Cardiomyocytes
Accompanying Neovascularization**

(immunohistochemistry: blue nucleus rat Ki67, brown cytoplasm troponin I)

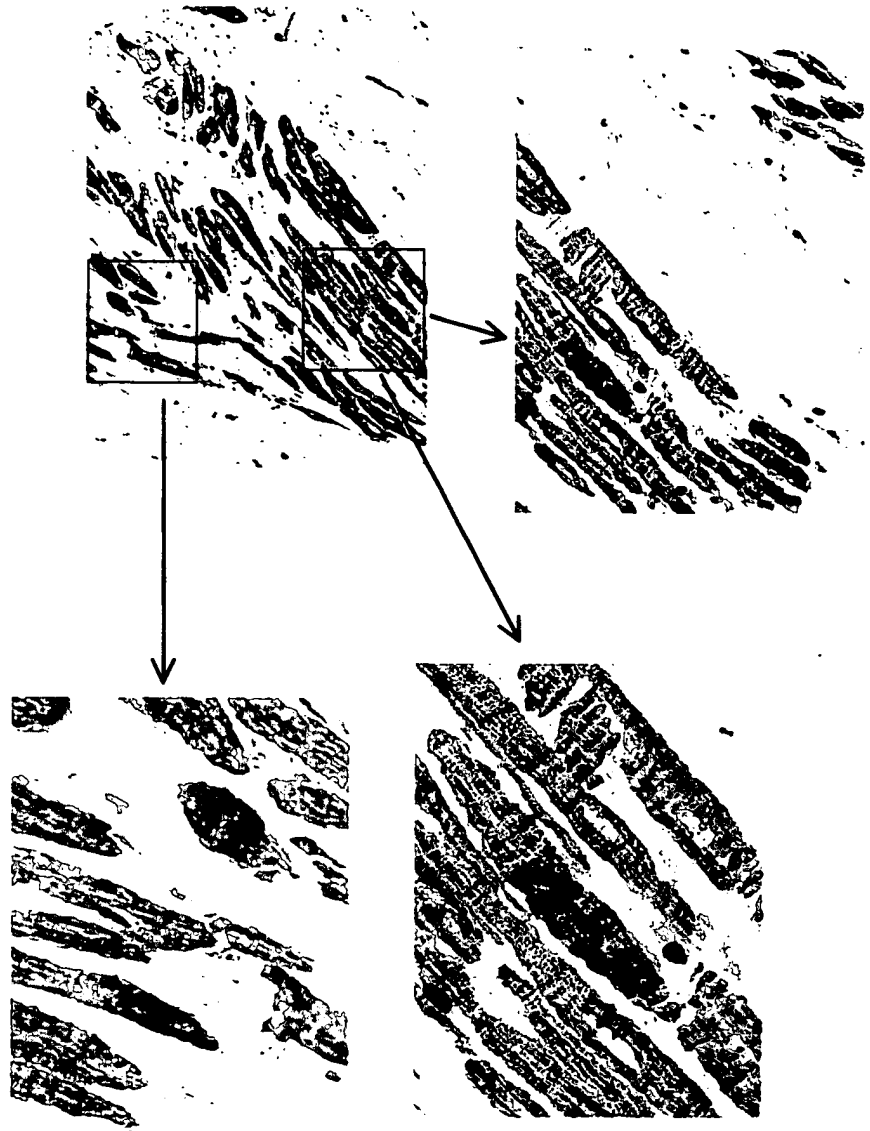
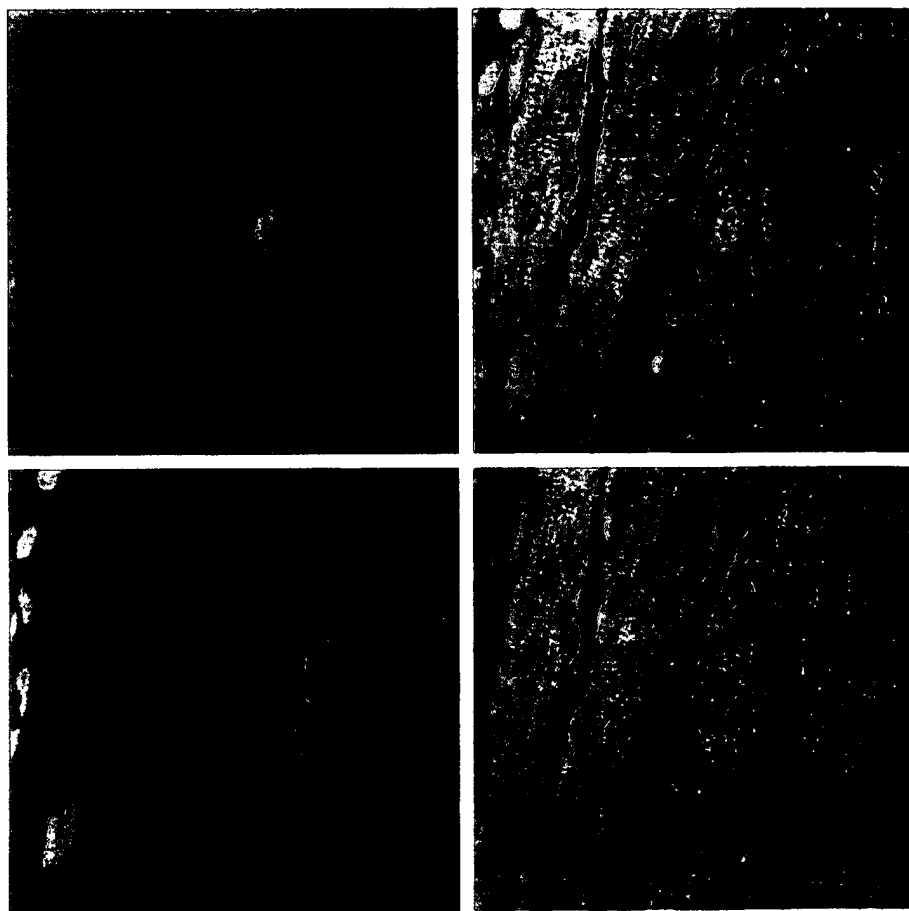


FIGURE 22C

(c)



Confocal microscopy showing nuclear cycling (blue nucleus, green rat Ki67)
of troponin I-positive mature cardiomyocyte (red cytoplasm)

FIGURE 23

number of apoptotic myocytes/high
powered field at peri-infarct region

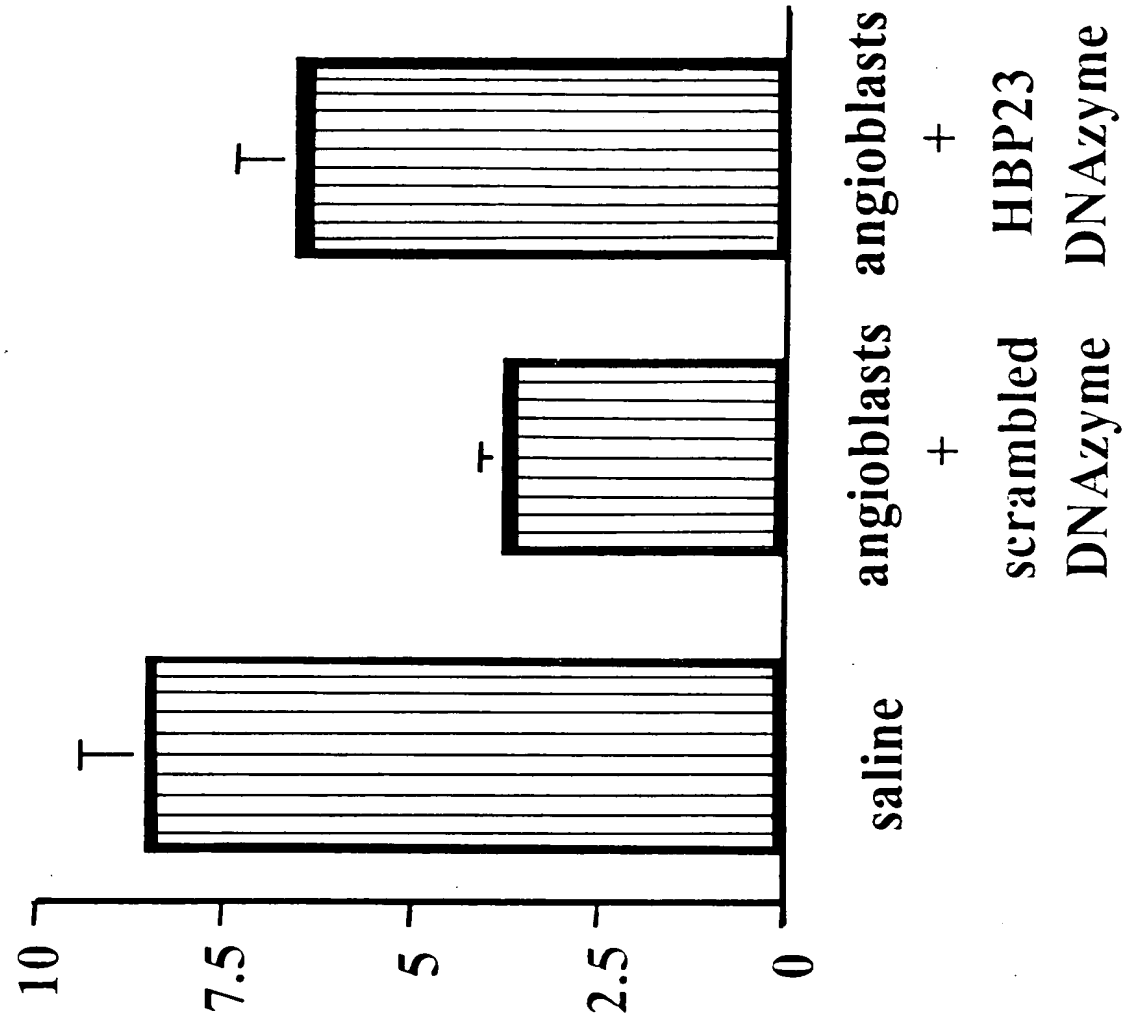


FIGURE 24A

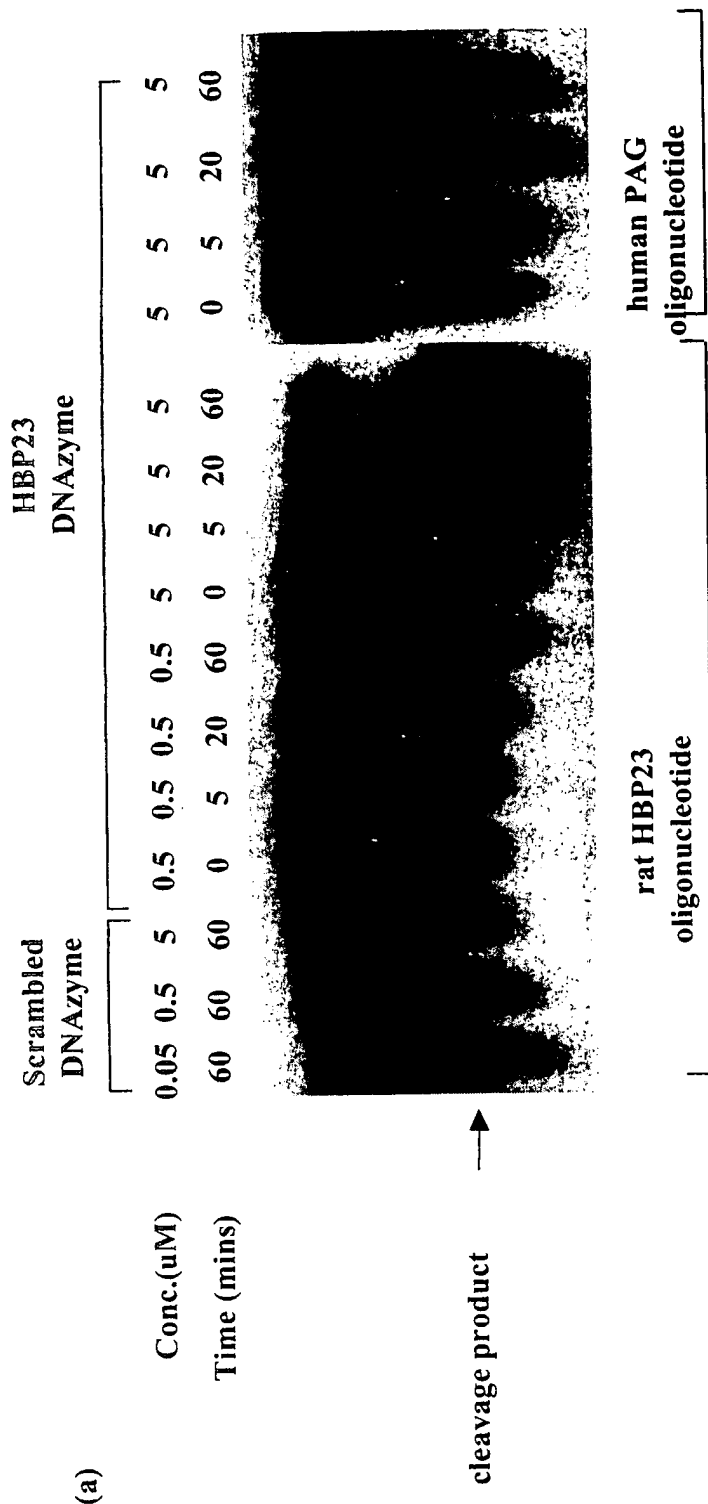


FIGURE 24B

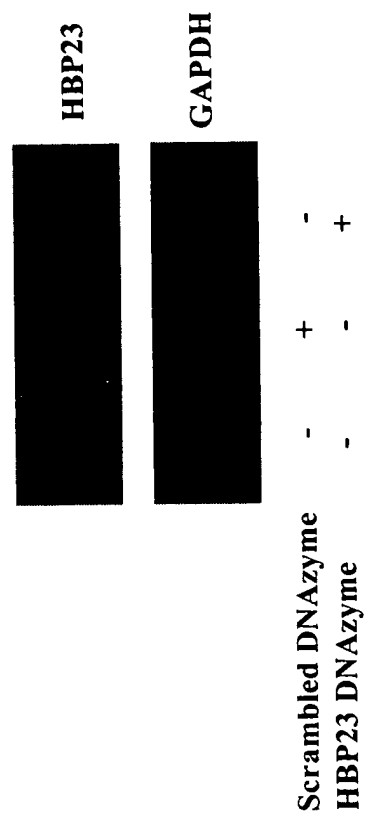
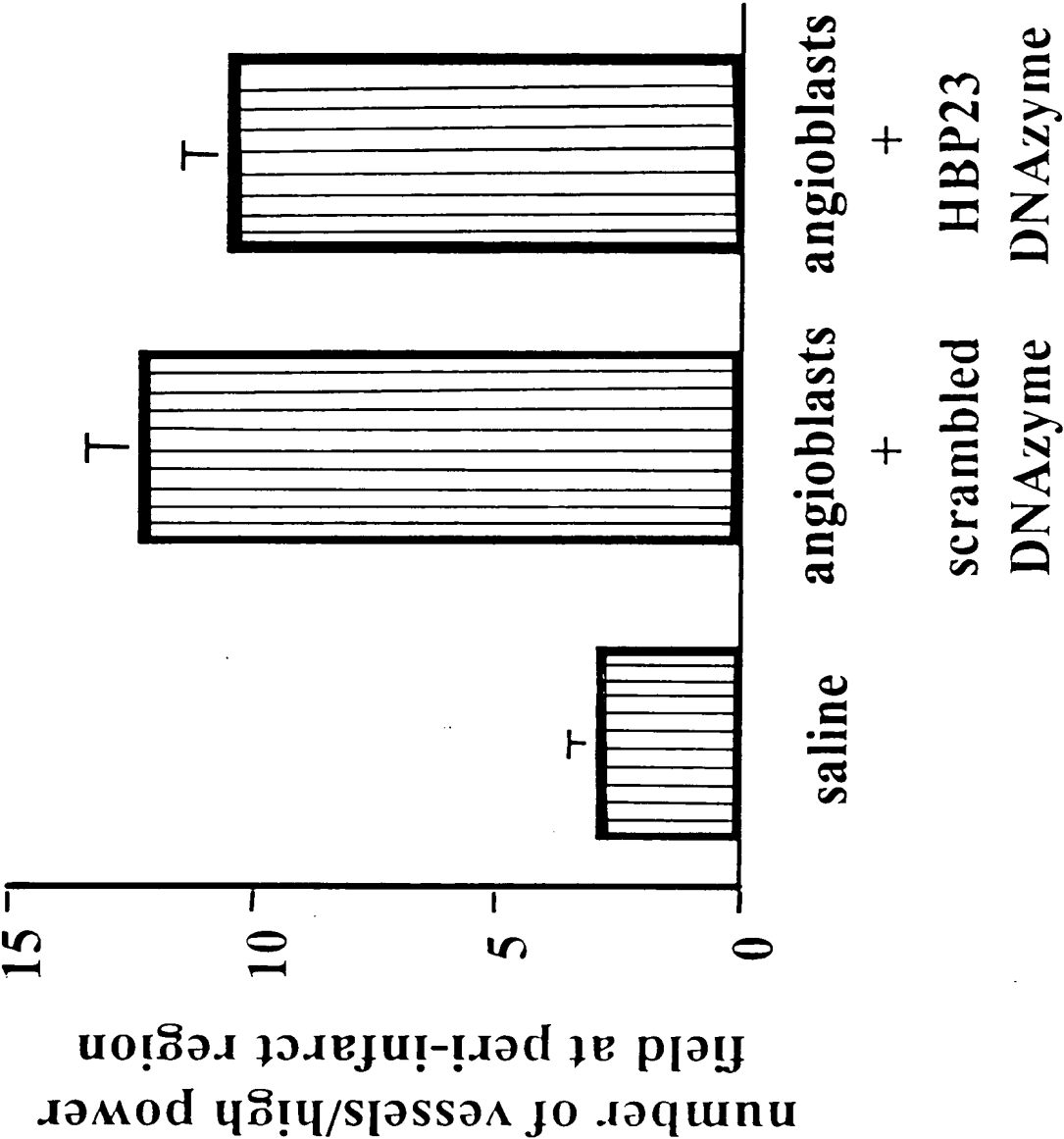
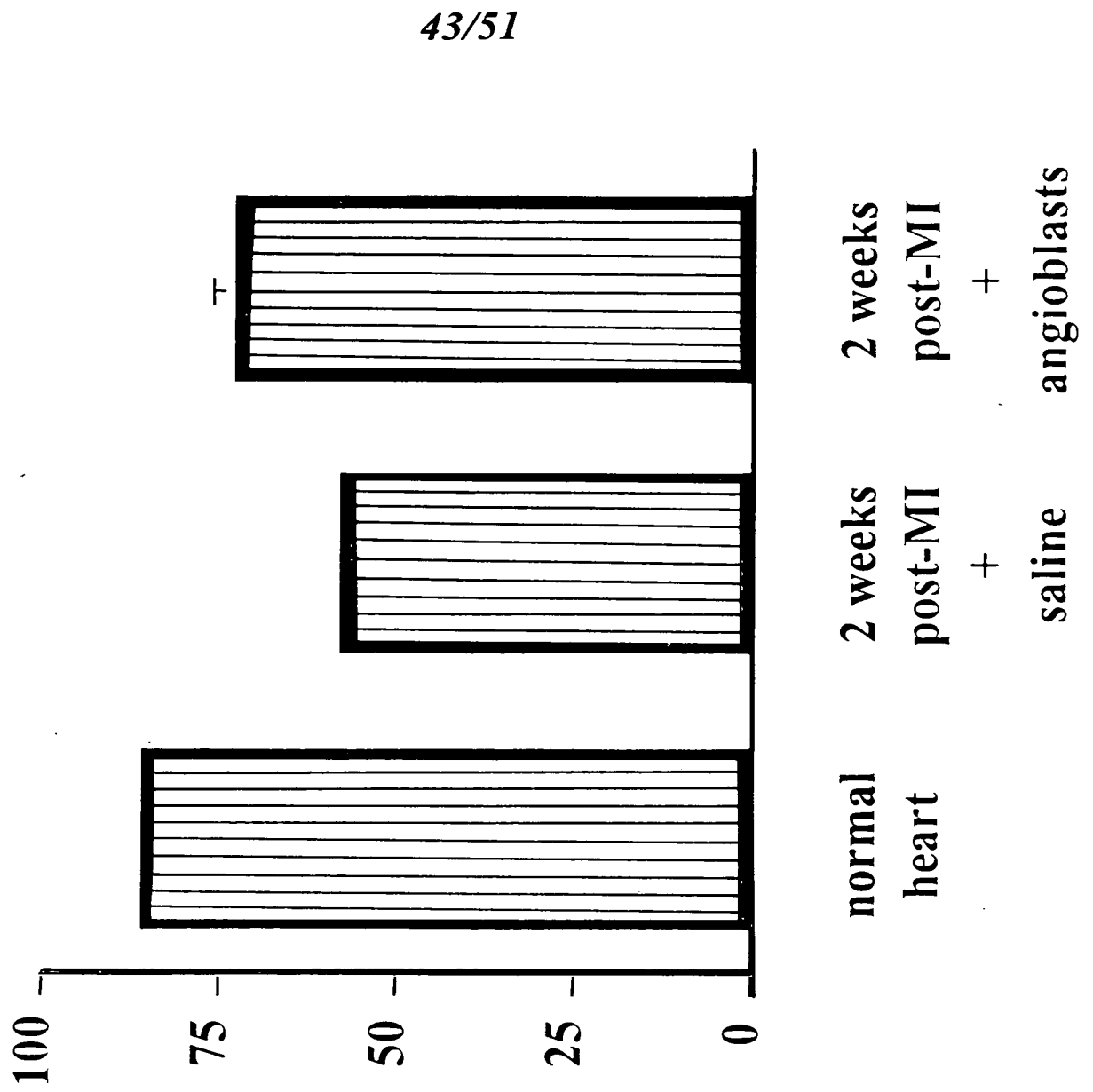


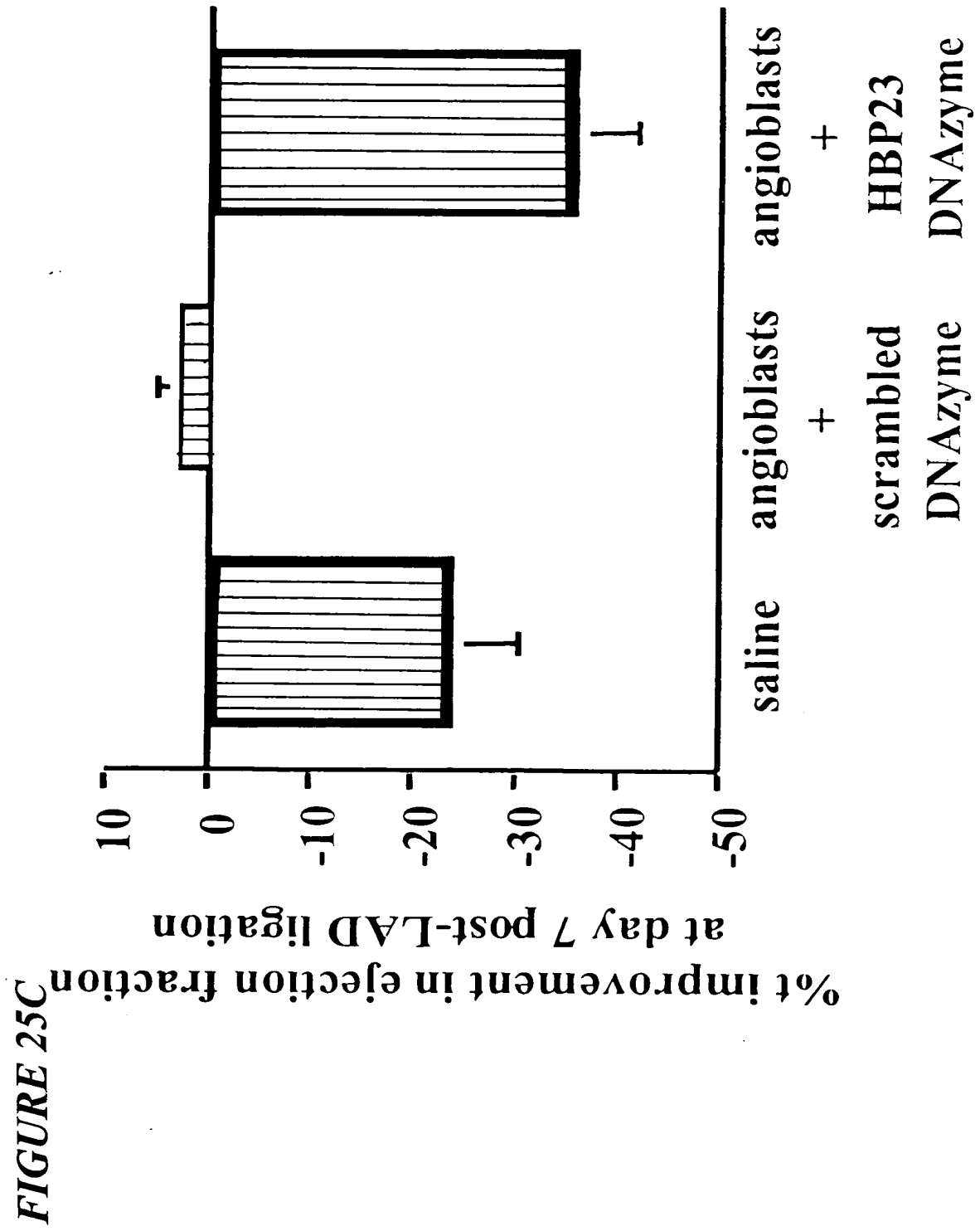
FIGURE 25A



relative expression of HBP23 mRNA

FIGURE 25B





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FIGURE 26

*Pattern Of CXCR4 Expression Following Acute Myocardial Ischemia Is
Focal And Peri-Infarct*

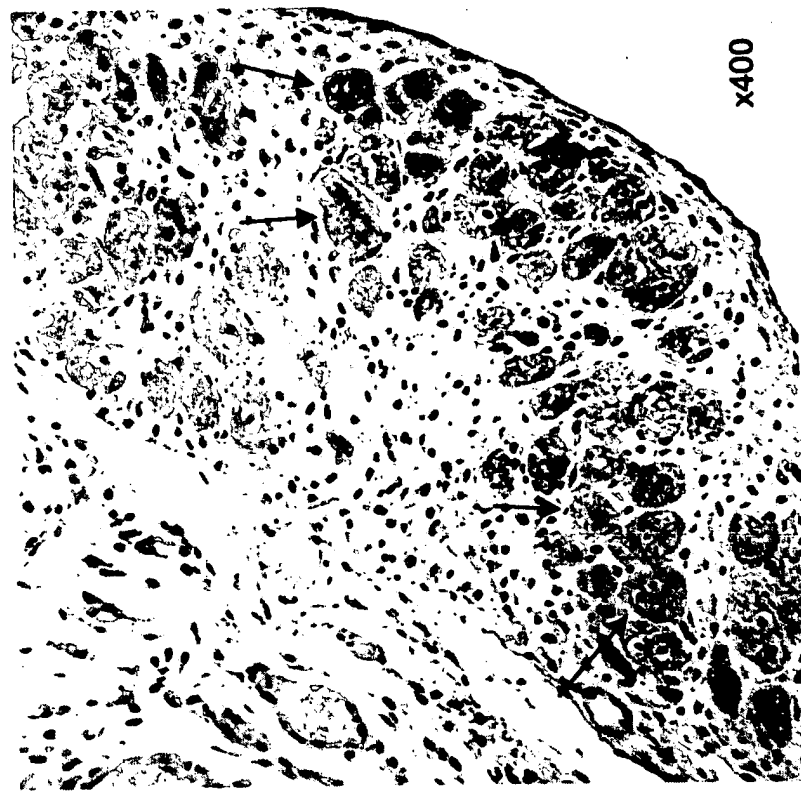
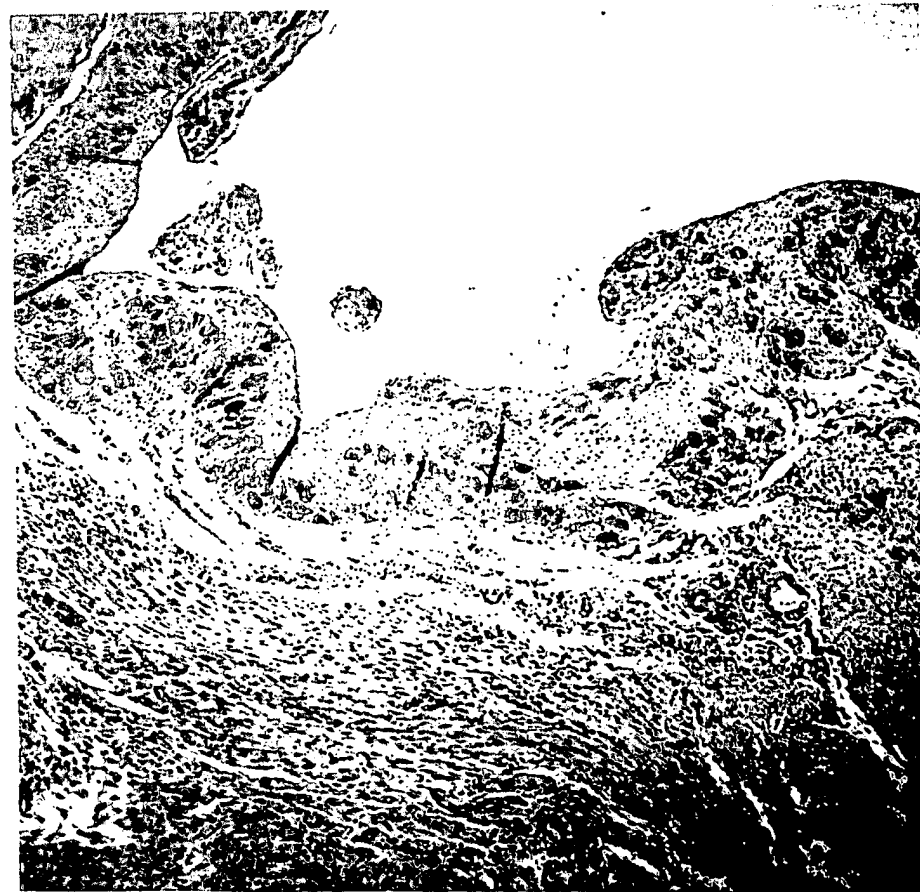


FIGURE 27

Single Myocardial Injection Of SDF-1 After Acute Ischemia Induces Early Phosphorylation Of AKT

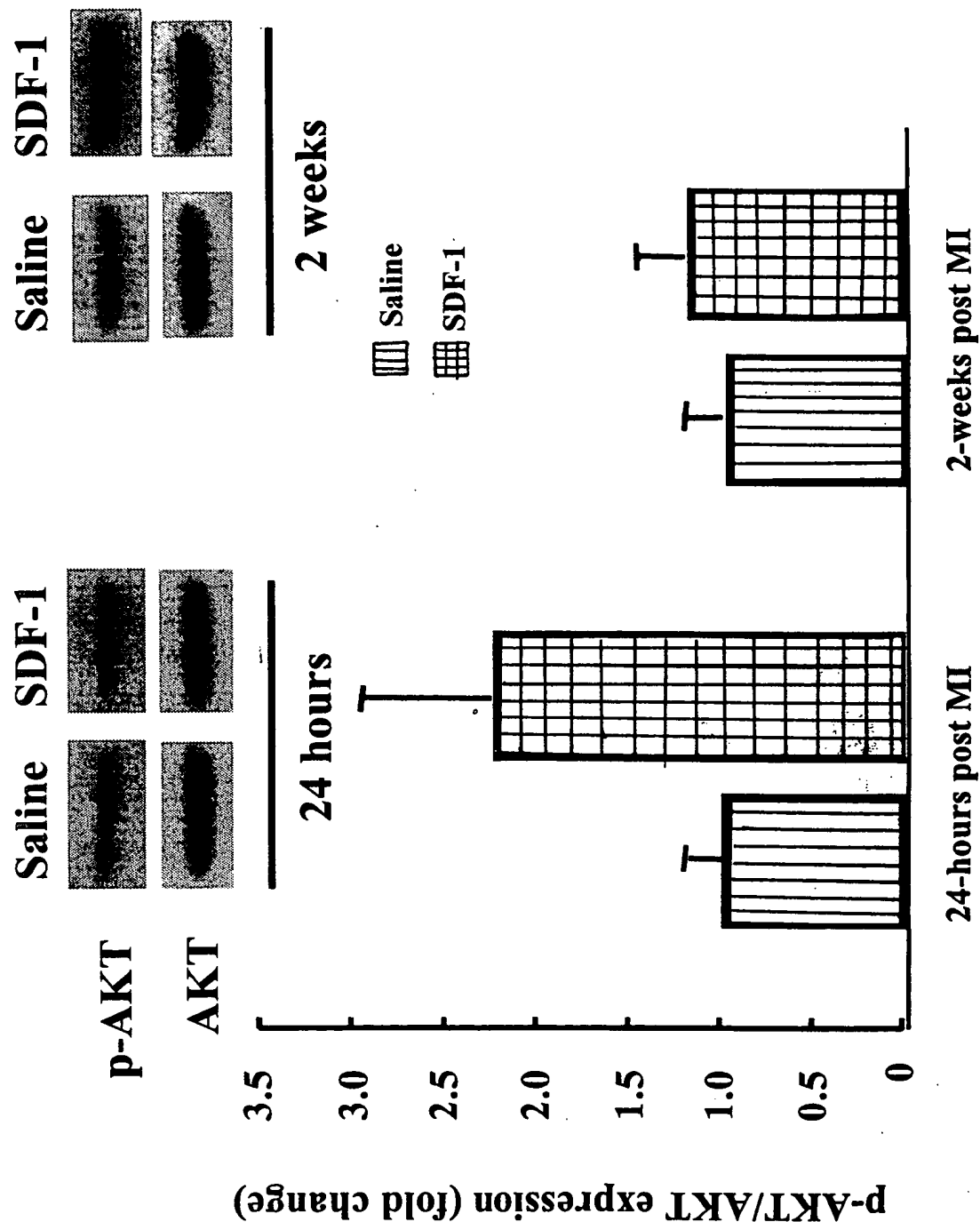


FIGURE 28

Cultured Rat Neonatal Cardiomyocytes Express CXCR4

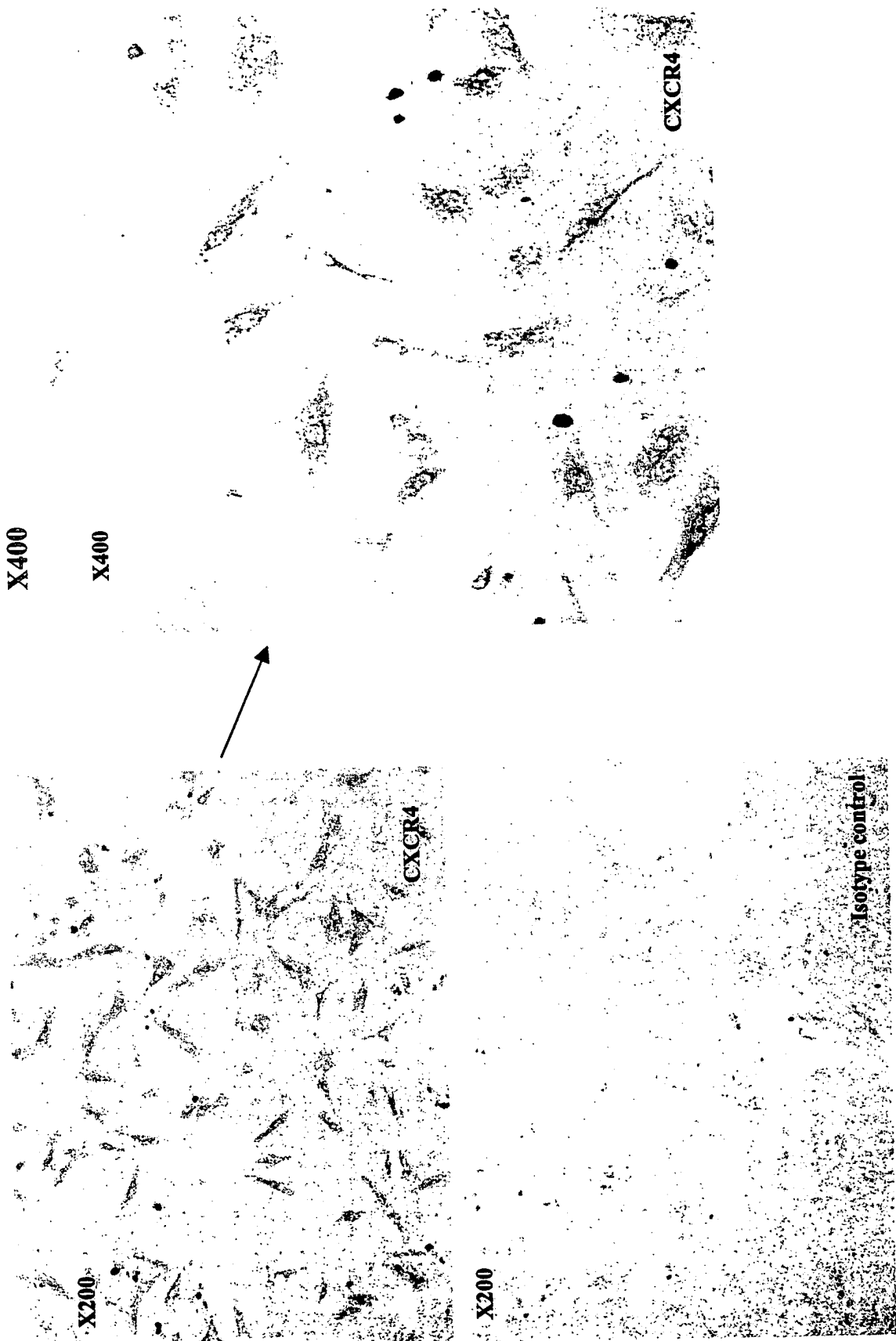
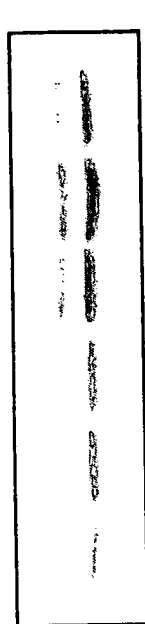


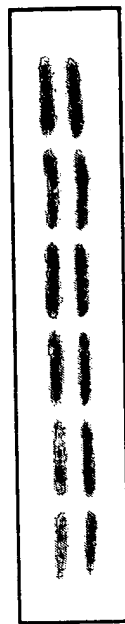
FIGURE 29

Effect of SDF (100nM) on pAKT/AKT and pERK/ERK
Expression in Rat Neonatal Cardiac Myocytes

SDF 0 1 5 10 15 30 min

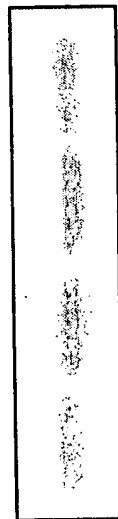


pERK

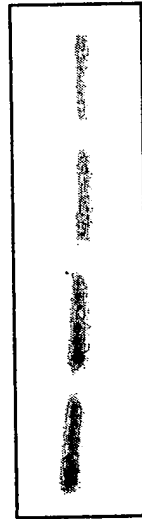


ERK

F 0 1 5 10 min



pAKT



AKT

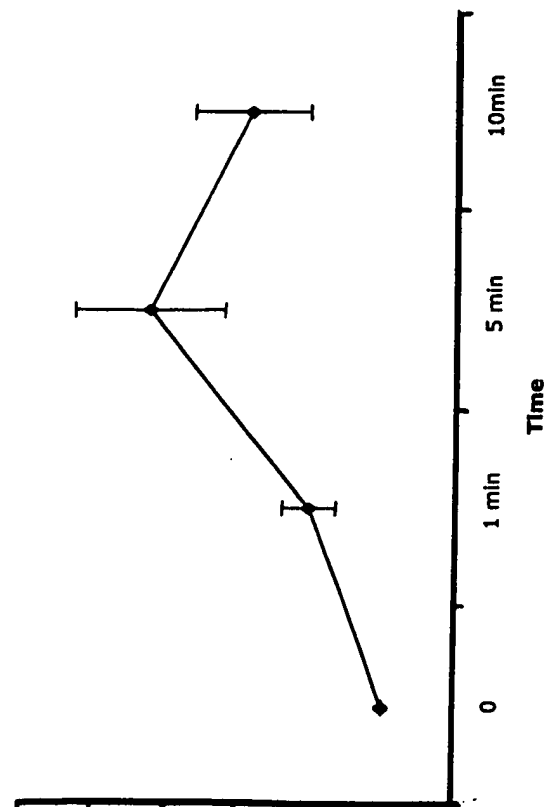
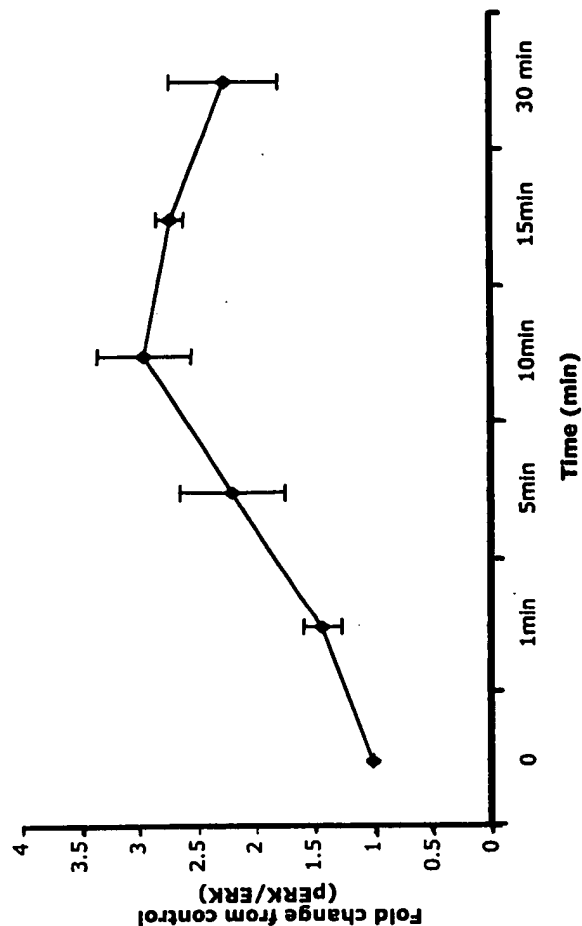


FIGURE 31

*Intracardiac SDF-1 Augments CSF-Induced Neovascularization
And Regeneration Of Acutely Ischemic Myocardium*

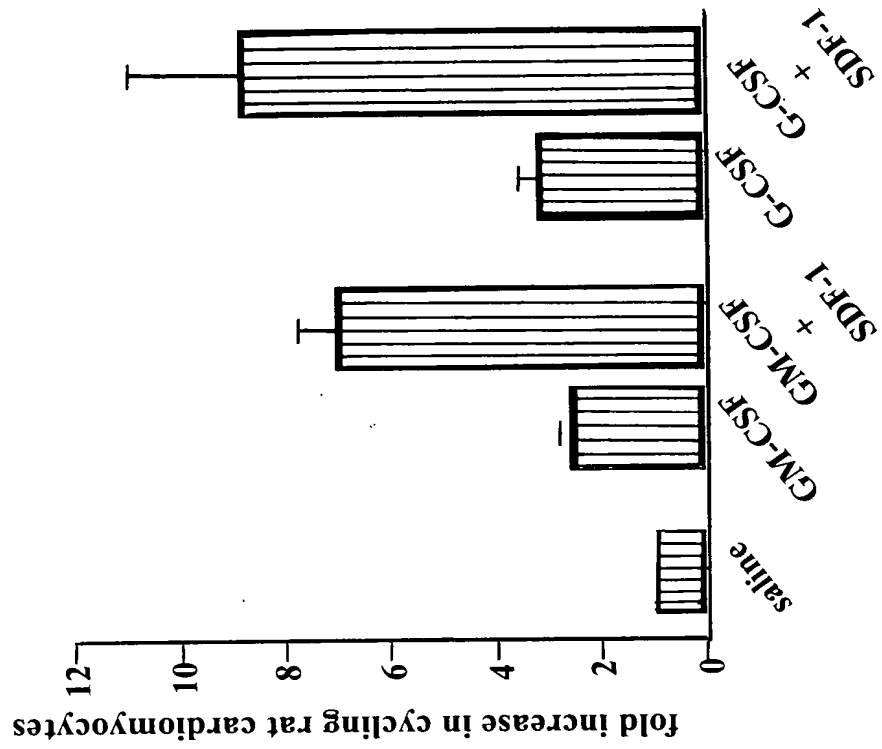
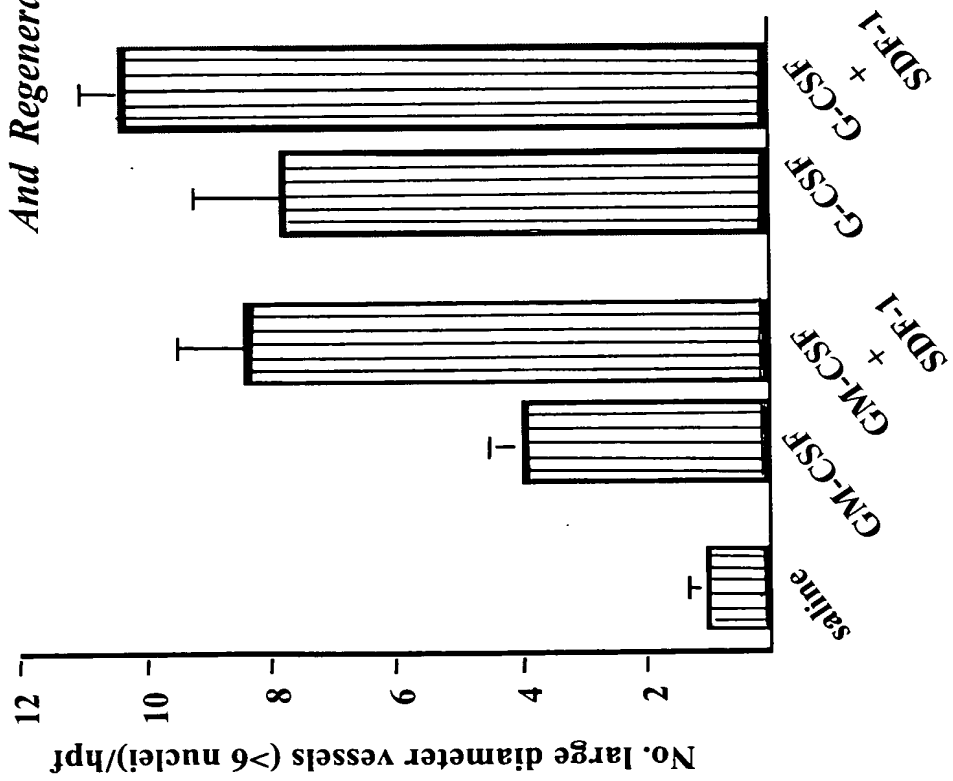


FIGURE 32

Intracardiac SDF-1 Augments CSF-Induced Functional Myocardial Recovery After Acute Ischemic

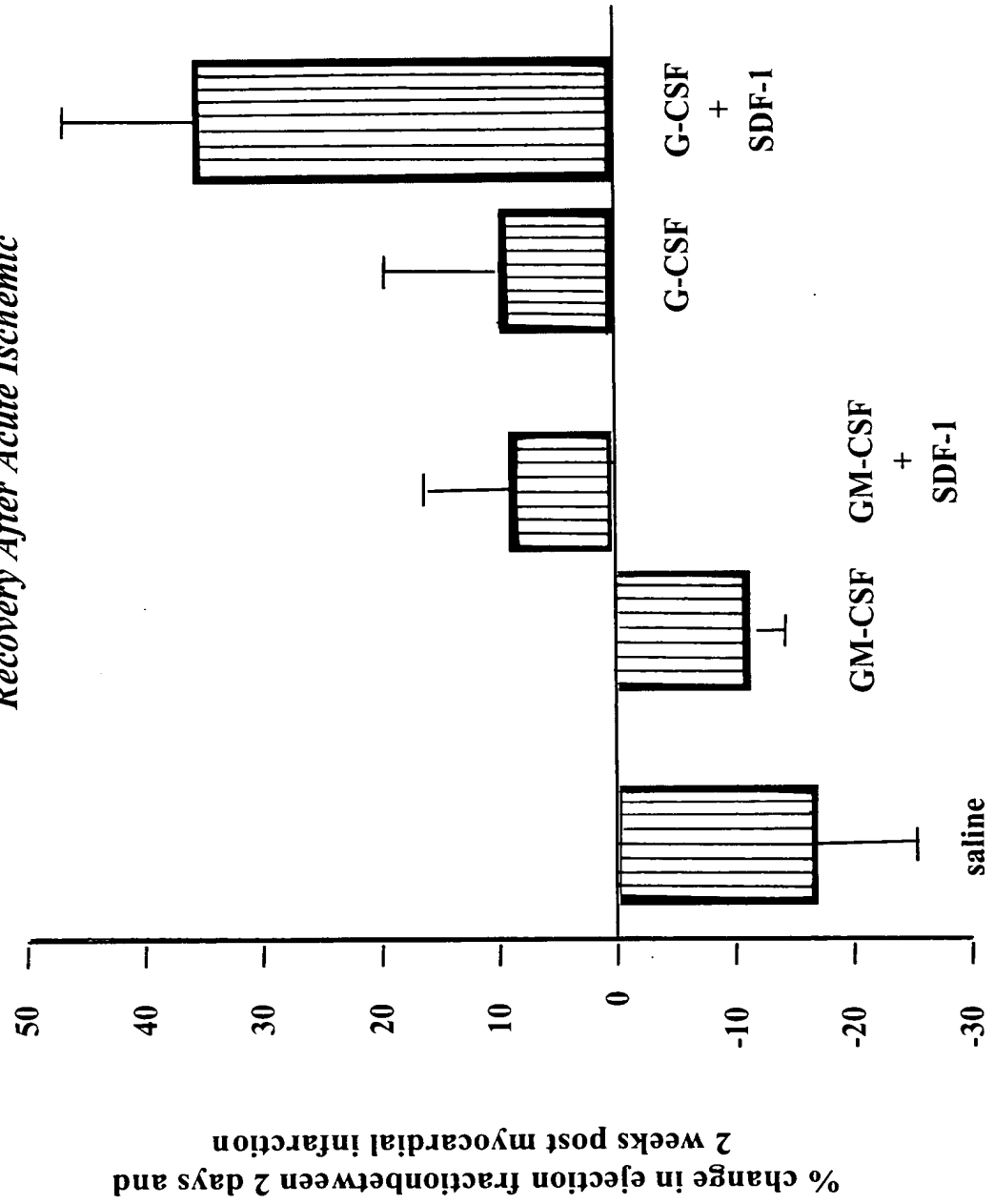


FIGURE 30

*SDF-1 Protects Rat Neonatal Cardiomyocytes Against
H2O2-Induced Apoptosis*

